1998 Natural, Cultural, and Historical Resources Inventory

of the

Central New Hampshire Region



Regional Environmental Planning Program

Produced by:

Central New Hampshire Regional Planning Commission

With the assistance of:

NH Department of Environmental Services

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Merrimack River from Old Turnpike Road in Concord

Regional Environmental Planning Program

December 1998





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Through the diligent leadership and lobbying efforts of the Society for the Protection of New Hampshire Forests, Senate Bill 493 was signed by Governor Jeanne Shaheen on June 15, 1998. This Senate Bill created a 26-member commission to "...determine the feasibility of a new public-private partnership to conserve New Hampshire's priority natural, cultural, and historical resources." After utilizing the information collected through the REPP by each of the State's nine regional planning commissions, the Committee initially reported its findings to the Governor in November 1998. A copy of the legislation and the January 1999 Interim Report can be located in *Appendix A*.

Production and printing of this *Inventory* has been made possible by a two-year partnership with the NH Department of Environmental Services through funding appropriated by the NH State Legislature for fiscal years 1998 and 1999 (July 1, 1997 - June 30, 1999).

CNHRPC chose to collect this important information in a format which is not only useful for the State of New Hampshire's purposes, but also in a format that facilitates a long-awaited update to its twenty-five year old Natural Resources Inventory. Utilizing public forums, individual meetings, research, and survey methods, the CNHRPC collected data with the assistance of the UNH Co-operative Extension, local Conservation Commission Chairs and members, and the Department of Environmental Services.

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Abigail Ransmeier, CNHRPC Summer Intern Karen Andruszkiewicz, CNHRPC Natural Resources Assistant

The Central New Hampshire Regional Planning Commission is very pleased to report its findings in the 1998 Natural, Cultural, and Historical Resources Inventory of the Central New Hampshire Region. Knowing this document will produce perhaps more questions than answers, the CNHRPC highly encourages municipalities to contact its staff to correct any inaccuracies and with additional information to add to the **Municipal Profiles**.



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Executive Summary

With the summer 1998 adoption of Senate Bill 493, which created the New Hampshire Land and Community Heritage Committee to study the feasibility of a new public/private land preservation partnership, an unprecedented opportunity for statewide natural, cultural, and historical resource identification became available. This Committee and the implications of its determining work have brought renewed attention to New Hampshire's struggle to balance growth with retaining its rural character. This *Inventory* is but one of the many tools which have recently become available as a result of the Committee and as a result of the tireless activities of dedicated conservationists throughout the State over the last several years.

Regional Environmental Planning Program Introduction

The 1998 Natural, Cultural, and Historical Resources Inventory of the Central New Hampshire Region is intended for a wide variety of uses and was thus compiled using all available sources, spanning from local citizen comments to federal documentation. This Inventory owes its existence to the Regional Environmental Planning Program (REPP), which is a partnership between all nine regional planning commissions (RPCs) in the State and the NH Department of Environmental Services (NH DES). While each RPC chose its own project to pursue, the Central New Hampshire RPC felt that an update to its 1974 Natural Resources Inventory was in order. It is the aim of this Inventory to encourage municipalities within the Central Region to 1) further investigate and record their natural, cultural, and historical resources 2) document the resource priorities in their Master Plan and 3) undertake appropriate measures for resource protection.

Regional Perspective

A compilation of general demographic, conservation, and attitudinal trends within the Central Region allows for a broad resource analysis of the Region. *Area and Demographics* examines the growing municipal population versus the municipal land acreage. Conservation and **Preservation** presents current use and conserved land acreage on a municipal basis and illustrates theoretical per capita land availability. Natural, Cultural, and Historical Resources interprets the three regional maps included within this *Inventory*, a regional base map, topographic map, and an undeveloped lands map. Member municipalities who actively participated in the REPP with CNHRPC will receive a set of 1" = 2000' maps detailing the specific resources identified within their communities. Also, general resources which are best described on a regional basis are so noted. Spring 1998 Natural, Cultural, and Historical Resources Survey, conducted by the CNHRPC in early 1998, displays results from 60 out of almost 450 surveys mailed (15%). General resources priorities within the categories of Water, Land and Forestry, Historical/Cultural, Ecological, Geologic, Public Facilities, and Other Resources were tallied from responses received to the survey. A number of charts are included which depict general regional priorities; specific municipal priorities as determined from the survey are found within each municipality's Municipal Profile.

Municipal Profiles

The *Municipal Profiles* are the main component of the *Inventory*. Within the general categories of resources named above, data was researched and compiled by CNHRPC staff with the assistance of several participating municipalities. A series of meetings was held in the spring of 1998 to gather information from the local level and to encourage further participation in the REPP. Each of the twenty-one municipalities under CNHRPC's jurisdiction has had a *Municipal Profile* conducted regardless of participation in the REPP. As the *1998 Natural*, *Cultural*, *and Historical Inventory of the Central New Hampshire Region* is meant to be an ongoing record, municipalities are highly encouraged to closely review their *Profile* and to submit changes, corrections, or deletions to CNHRPC for the next published version.

Future Directions in Resource Protection

This section is meant to encourage municipalities to further their own resource protection measures and to explore other means of non-municipal resource protection. Sample General Resource Protection Goals and Objectives for Municipalities offers a basic set of goals which could be incorporated into the Master Plan and explains many different sample objectives which could be utilized to accomplish some of these goals. Legislatively Protecting New Hampshire's Resources details recent legislation which has worked to efficiently protect resources and to commission studies which will be utilized to create a better understanding of the status of New Hampshire's rural and environmental character. State/Regional and Public/Private Conservation and Preservation Partnerships are essential; each group has its own expertise and by working together, great feats can be accomplished.

Regional Environmental Planning Program Introduction

In order to adequately balance New Hampshire's ever-increasing residential, commercial, and industrial growth with its irreplaceable resources, a program entitled the Regional Environmental Planning Program (REPP) was established through the NH Department of Environmental Services (NH DES). The REPP gives each municipality in New Hampshire the opportunity to identify its priority natural, cultural, and historical resources by working closely with its regional planning commission. Driven by the continued yearly reduction of federal funding for the Land and Water Conservation Fund (LWFC) and the USDA Forest Legacy Program, the REPP charges each regional planning commission in New Hampshire with identifying these resources within the municipalities it holds jurisdiction over.

This document, an update to the 1974 *Natural Resources Inventory of the Central NH Region*, is meant to be utilized as a working document. Numerous data sources have been researched and consulted to compile the *Inventory*, including Master Plans, Town Annual Reports, existing biological data publications of the 1960's, Geographic Information System (GIS) data layers from Complex Systems Research Center, and most importantly, the anecdotal and local information available only from the residents of the municipalities themselves.

A natural, cultural, and historical resources survey was completed by CNHRPC in conjunction with the compilation of the data for the *Inventory*. Although the results indicated many different perspectives and concerns, definite commonalities were found. These results are further explained in the *Spring 1998 Natural*, *Cultural*, and *Historical Resources Survey* section in the *Regional Perspective* and in each *Municipal Profile*.

Why People Love Central New Hampshire

The abundant resources of the Central New Hampshire Region define the very essence of the area. Historically, the Merrimack, Soucook, and Contoocook Rivers and their fertile floodplains provided the initial sustenance and transportation networks of the Native American peoples. Encampments were situated on bluffs, at the confluence of rivers, and on flat, dry soil. Wild plants were harvested for food and medicine, and animals were hunted for meat and fur. An extensive trail network crossed the Region and served to link the Native American population across the State.

The first European settlers were also drawn to the Region for its life-supporting variety of resources. Forests were cleared of trees for agriculture, and rocks left over from the glacial deposition were painstakingly removed and hand-placed into stonewalls. Wild game such as red fox, rabbit, turkey, pheasant, and bear complemented a diet of food grown in the rich agricultural soils. Varied forest stands provided the lumber for forts, homesteads, furniture, and village centers; local quarries were mined for their stone and metals. Industry began to take shape as the local resources were increasingly harvested and distributed.

The attraction of the locality was not lost on the settlers, and they efficiently carved out their livelihood by utilizing the area's natural resources. In doing so, they created cultural resources which served to link the population together into a common local heritage. Meetinghouses, churches, cemeteries, and even annual events or gatherings further cemented the people to each other and the people to the land. This heritage was passed down from generation to generation, and this patchwork of culturalism, regardless of whether one was born here or moved to the area, now gives Central Region residents the common connection to their past and to their neighbors.

The rural character of the Central New Hampshire Region and the quality of life it brings are fundamental to its residents. The temperate climate, proximity to the sea and mountains, abundant forests and rolling topography still play an alluring role in the decision to call Central New Hampshire home. Backyard or nearby recreational opportunities such as hiking, bicycling, fishing, skiing, hunting, or swimming abound. This good fortune is dependent on the ability to co-exist in harmony with the natural, cultural, and historical resources that invite residents to call Central New Hampshire home.

Resource Protection

The importance of resource preservation has encouraged many national conservation organizations to establish a New Hampshire presence alongside committed, influential local conservation institutions. Non-profit organizations such as The Nature Conservancy, NH Audubon Society, Society for the Protection of NH Forests, NH Land Preservation Alliance, and the Trust for NH Lands, to name a few, dedicate their missions to protecting New Hampshire's resources. These and other local-chapter conservation organizations are listed in the *Resource Agencies* Appendix. While tremendous protection efforts are realized by these organizations, often the most important local protection and preservation opportunities and responsibilities are best discerned and acted upon by municipal residents. Thus, volunteer Conservation Commissions are charged with inventorying and protecting the resources of the community with the support of the Planning Boards and Boards of Selectmen.

Volunteerism and a willingness to work together has shaped the atmosphere which supports preserving the resources in the Region. A majority voice vote at a Town Meeting forum has the power to create resource protection measures; this feat would not be possible without a population of concerned residents cognizant of their finite resources. Central New Hampshire residents are aware that what they love most about their home, their land, and their community, will be subject to continuing population and development growth. Communities are aware that they will be able to proudly offer their children the Region's heritage and culture only if they are careful stewards of its natural and historical resources. With the population in each municipality increasing, with the building of additional housing units, and with the creation of new roads to reach the now coveted "secluded areas", local municipalities are taking preventative measures while the opportunities are available.

New Hampshire's concerned voices have been heard by the State Legislature. Recent passage of bills to create the NH Land and Community Heritage Committee, to conduct a Land Use Management and Farmland Preservation Study, to create a committee to study sprawl, and even the passage of a bill for a conservation license plate trust fund in the last legislative session all point toward a strong State government backing for preserving New Hampshire's finite resources.

1998 Natural, Cultural, and Historical Resources Inventory of the Central New Hampshire Region

Like volunteerism and legislative action, this *Inventory* is designed to be a tool for resource recognition and protection. While the Regional Environmental Planning Program has made possible its production in 1998, the *Inventory* should be considered an on-going record of the resources available within the Central Region. While a single comprehensive document may not be feasible due to the sheer volume of details and information available, the *Inventory* is meant to be a brief, standardized synopsis of the resources of each municipality.

As identification is the initial key step in resource protection, this *Inventory* is intended to encourage each municipality within the Central New Hampshire Planning Region to closely examine its multitude of resources through a more comprehensive natural, cultural, and historical resources town-specific inventory. Such an inventory would serve as an element of the Master Plan and should help guide the municipality into the future in a conservation-minded direction. This concept and other resource protection ideas are discussed in the *Future Directions in Resource Protection* chapter.



Regional Perspective

A natural, cultural, and historical resources inventory on a large-scale regional level involves collecting and examining a great amount of data, some generalized and some specific. In order to gauge a regional perspective of the varied resources, the CNHRPC has utilized a number of information sources that should fairly represent the Central New Hampshire Region; for simplicity purposes, the majority of references which were used in this section are cited not here but in the *Municipal Profiles*. Current demographic statistics complement the basic inventory of resources of the individual municipalities within the Region (detailed in the *Municipal Profiles*); combined with the attitudes and values of what is important to people within the Region, a general regional perspective is gained.

Central New Hampshire Regional Planning Commission

The CNHRPC was created by the State Legislature in 1970 as one of nine regional planning commissions (RPCs) in New Hampshire. After a brief two-year deactivation, the CNHRPC was reinstituted in 1986 by dedicated local individuals who held a strong belief in regional planning. Nineteen towns and one city were under the jurisdiction of CNHRPC until 1993, when the Town of Wilmot opted to change to the Central Region from the Upper Valley Lake Sunapee RPC.

TABLE 1		General Comparisons by Municipality						
	1998 Member of CNHRPC	Conservatio n Commission	1998 Land Use Change \$ to Conserv Fund	Historic District	Historical Society or Commission			
Allenstown	no	ves ('98)	n/a		yes			
Boscawen	yes	yes	yes		yes			
Bow	yes	yes	yes		yes			
Bradford	yes	yes	yes	yes	yes			
Canterbury	yes	yes	yes	yes	yes			
Chichester	no	yes	no		yes			
Concord	yes	yes	yes	yes	yes			
Deering	yes	yes	yes	yes	yes			
Dunbarton	yes	yes	yes		yes			
Epsom	no	yes	no					
Henniker	yes	yes	proposed '99	yes	yes			
Hillsborough	yes	yes	yes ('96)	yes	yes			
Hopkinton	yes	yes	yes		yes			
Loudon	yes	yes	no		yes			
Pembroke	yes	yes	no		yes			
Pittsfield	yes	yes ('98)	n/a	yes	yes			
Salisbury	yes	yes	no		yes			
Sutton	yes	yes	yes					
Warner	yes	yes	no		yes			
Webster	no	yes	no					

*****			,	
Wilmot	yes	no	n/a	yes

These comparisons show that in 1998, 17 municipalities out of the 21 were members of CNHRPC. Only one municipality, Wilmot, did not have an established Conservation Commission by 1998 and two, Pittsfield and Allenstown, recently established their own Commissions. Of particular note, seven municipalities have voted not to support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. A minority of municipalities within the Central Region have established Historic Districts, although most have private Historical Societies working to preserve the historical and cultural resources.

Area and Demographics

The Central Region is comprised of 20 towns and the City of Concord, totaling 526,096 acres and having a population base of 102,195. With a total number of 42,522 housing units in the Region, the average population per household is 2.4 persons.

TABLE 2

2	Area and Demographics by Municipality					
	Geogr	aphic	Demo	graphic	An	alysis
	Total Acreage (1991 CNHRPC)	% of CNH Region	Population (1997 NH OSP)	Number of Housing Units (1996 NH OSP)	Population Per Housing Unit	Total Land Acreage Avail Per Hous Unit
Allenstown	13 184	2.6	4 823	1 981	2.4	6.7
Boscawen	16.256	3.1	3.616	1.275	2.8	12.7
Bow	19.264	3.7	6,406	2.211	2.9	8.7
Bradford	22,784	4.4	1,420	781	1.8	29.2
Canterbury	28,672	5.6	1,800	788	2.3	36.4
Chichester	13,568	2.6	2,072	789	2.6	17.2
Concord	41,920	8.1	37,925	16,228	2.3	2.6
Deering	20.288	3.9	1.766	801	2.2	25.3
Dunbarton	20.416	4.0	2.007	796	2.5	25.6
Epsom	21,696	4.2	3,866	1,542	2.5	14.1
Henniker	28,352	5.5	4,122	1,633	2.5	17.4
Hillsborough	28,288	5.5	4,650	2,252	2.1	12.6
Hopkinton	28,416	5.5	5,014	2,064	2.4	13.8
Loudon	29,696	5.8	4,504	1,657	2.7	17.9
Pembroke	14.528	2.8	6.724	2.594	2.6	5.6
Pittsfield	15,488	3.0	3,930	1,617	2.4	9.6
Salisbury	35,344	4.9	1,125	456	2.5	77.5
Sutton	27,456	5.3	1,489	815	1.8	33.7
Warner	35,392	6.9	2,460	1,122	2.2	31.5
Webster	18,048	3.5	1,478	620	2.4	29.1
Wilmot	47.040	9.1	998	500	2.0	94.1

TOTALS	526,006	100%	102 105	42 522	2.4	24.8
TOTALS	526,096	100%	102,195	42,522	2.4	

Not only have populations risen dramatically since 1970, housing units have also increased to meet the new demand. **TABLE 3** illustrates the tremendous population growth of each municipality within the last twenty-seven years, and gives projections for populations in the year 2010:

LE 3	Population Growth and 2010 Projections by Municipality					
		nd Present Pop		Projections		
	1970 Population (1970 US Census)	1997 Population (1997 NH OSP)	% of Growth	2010 Population (1997 NH OSP)	% of Growth from 1997 Population	
Allenstown	2 732	4 823	77%	5 378	12%	
Boscawen	3,162	3,616	14%	4,033	12%	
Bow	2,479	6,406	158%	6,787	6%	
Bradford	679	1,420	109%	1,593	12%	
Canterbury	895	1.800	101%	1.967	9%	
Chichester	1.083	2.072	91%	2.302	11%	
Concord	30,022	37.925	26%	42,220	11%	
Deering	578	1,766	206%	2,199	25%	
Dunbarton	825	2,007	143%	2,197	10%	
Epsom	1,469	3,866	163%	4,312	12%	
Henniker	2,348	4,122	76%	4,628	12%	
Hillsborough	2.775	4.650	68%	5.541	19%	
Hopkinton	3,007	5,014	67%	5,545	11%	
Loudon	1,707	4,504	164%	5,082	13%	
Pembroke	4,261	6,724	58%	7,450	11%	
Pittsfield	2,517	3,930	56%	4,342	11%	
Salisbury	589	1,125	91%	1,248	11%	
Sutton	642	1.489	132%	1.667	12%	
Warner	1.441	2,460	71%	2.710	10%	
Webster	680	1,478	117%	1,632	10%	
Wilmot	516	998	93%	1,102	10%	
REGION	64,407	102,195	59%	113,935	10%	

Nearly all Central New Hampshire Region municipalities experienced significant growth, the majority of which occurred in the growth booms of the 1970's and 1980's. Although the current projected trend slows from the previous amount of growth, new housing, and therefore new development, will be required to sustain the population. These additional demands on the predefined number of acres within each municipality should be considered when dealing with conservation and preservation issues. The *Municipal Profiles* section contains more statistical

Conservation and Preservation

Using December 31, 1997 current use acreage data and known conserved land acreage data, a total of 70% of Central New Hampshire Region land is presently protected from development. In **TABLE 4**, the known conserved land acreages shown under the **Protected Land Acreage** column are comprised of public and private conservation lands (fee owned), conservation easements, state parks, federal lands, and additional town-owned lands. The individual lands are detailed in each municipality's *Municipal Profiles* section:

BLE 4		Protected La	and Statistics	by Municipality
	Total Acreage	Protected Land Acreage	% of Land Protected	Land Acreage Not Protected (includes Buildable, Unbuildable and Already Built Acres)
Allenstown	13 184	9 376	71%	3 808
Boscawen	16,256	13,347	82%	2,909
Bow	19,264	8,132	42%	11,132
Bradford	22,784	16,321	72%	6,463
Canterbury	28,672	22,959	80%	5,713
Chichester	13,568	7,812	58%	5,756
Concord	41.920	29.975	72%	11.945
Deering	20,288	17,278	85%	3,010
Dunbarton	20,416	13,648	67%	6,768
Epsom	21,696	15,730	73%	5,966
Henniker	28,352	19,640	69%	8,712
Hillsborough	28,288	16,510	58%	11,778
Hopkinton	28.416	23.617	83%	4.799
Loudon	29,696	17.899	60%	11.797
Pembroke	14,528	9,462	65%	5,066
Pittsfield	15,488	11,129	72%	4,359
Salisbury	35,344	21,939	62%	13,405
Sutton	27,456	20,064	73%	7,392
Warner	35.392	30.952	88%	4.440
Webster	18.048	16,167	90%	1.881
Wilmot	47,040	25,473	54%	21,567
TOTALS	526,096	367,430	70%	158,666

The total acres under current use represent a large majority of the number of acres considered protected. Within the Central Region, current use taxation appears to play an important role in securing land from development. As noted earlier, many municipalities have designated a proportion or all of the land use change tax toward a fund designed for the purchase of conservation lands.

A per capita analysis of the total land acreage and total protected land acreage of each municipality is illustrated in **TABLE 5**. The number of theoretical acres available for a person residing in the Central New Hampshire Region vary from 1.1 acres in Concord to 47.1 acres in Wilmot. Nearly identical results are received when comparing the theoretical protected acres available per person, where the low is also found in Concord at 0.8 acres and the high is again found in Wilmot at 25.5 acres.

TABLE 5	Per Capita Acreage Analysis by Municipality					
	Total Land Acreage Per Capita	Total Protected Land Acreage Per Capita				
	(Town Acreage / 1997 Town Population)	(Town Protected Land Acreage / 1997 Town Population)				
Allenstown	2.7	19				
Boscawen	4.5	3.7				
Bow	3.0	1.3				
Bradford	16.0	11.5				
Canterbury	15.9	12.8				
Chichester	6.5	3.8				
Concord	1.1	0.8				
Deering	11.5	9.8				
Dunbarton	10.2	6.8				
Epsom	5.6	4.1				
Henniker	6.9	4.8				
Hillsborough	6.1	3.6				
Hopkinton	5.7	4.7				
Loudon	6.6	4.0				
Pembroke	2.2	1.4				
Pittsfield	3.9	2.8				
Salisbury	31.4	19.5				
Sutton	18.4	13.5				
Warner	14.4	12.6				
Webster	12.2	10.9				
Wilmot	47.1	25.5				
TOTALS	11.0	7.6				

An analysis such as this is another way to weigh the difference between the acres technically available and the acres protected. If the difference between the **Total Land Acreage Per Capita** and the **Total Protected Land Acreage Per Capita** were divided by the **Total Land Acreage Per Capita**, the resulting percent would show the number of acres left within a municipality that are not protected. Example: Allenstown would be 2.7 - 1.9 = 0.8 then 0.8 / 2.7 = 29%.

Natural, Cultural, and Historical Resources

Due to the nature of this *Inventory*, the specific details of the resources within each municipality are to be found within the *Municipal Profiles* section. However, some elements lend themselves to be best addressed in a regional context.

Regional Base Map of the Central New Hampshire Region

A base map is the starting point for any municipal or thematic map series. With the features depicted on the base map, one can quickly locate proximities to roads, streams, or to the edge of Town. The base map concisely labels the names of features for quick identification. After the creation of a base map, different, more complicated map overlays are possible. **MAP 1** is the *Regional Base Map* of the Central New Hampshire Region. Because of the large scale portrayed on the 11" x 17" page (1:240,000 or one unit on the map equals 240,000 units on the ground), many details have been omitted out of necessity. These details are available, however, on the individual 1" = 2000' base maps provided to member municipalities participating in the REPP.

Topographic Map

The *Topographic Map* (MAP 2) is an example of an overlay map. Twenty-foot topographic contours overlay with perennial streams, lakes, ponds, and large wetlands to give an almost three-dimensional perspective of the Region. The hilliest areas are found in the northwestern municipalities in the Region, particularly in Wilmot, Warner, Sutton, and Bradford. In contrast, the eastern edge of the Region is relatively flat, Pembroke and Chichester remarkedly so. Additional examination of the Topographic Map identifies floodplains and watersheds. A Topographic Map at a scale of 1'' = 2000', along with mines, quarries, summits, sand and gravel pits, or other geologic resources identified by local officials, was provided to member municipalities participating in the REPP.

Undeveloped Lands Map

MAP 3 has been derived using the exciting analytic capabilities of a GIS. Conservation lands recently digitized by the Society for the Protection of New Hampshire Forests, hydrography, and buffered road data give a sense for the areas to target for further conservation. Specifically, all known Class I, II, V, and private roadways in the Region were buffered on either side by a distance of 500', eliminating the areas where potential development may lie. This new buffered digital layer, overlaid on top of the conservation lands and hydrography layers, creates an opportunity to view where development has not yet taken place in Region and illustrates if the areas which have not been built upon have already been placed under conservation.

A quick glance at the *Undeveloped Lands Map* shows that many large open spaces appear to exist within the Region, many of which abut existing conservation lands. Of note, many significant opportunities are possible where neighboring municipalities share a large open space and could potentially enter into cooperative agreements to secure the land from future development; also, conservation lands that terminate at the political boundary of one municipality may encourage the neighboring municipality to consider placing its own abutting lands under conservation. The possibilities are wide and varied for land preservation, and the *Undeveloped Lands Map* is simply one of many tools which can be utilized to best encourage further research into land conservation.

Other Specific Resources

Many other natural, cultural, and historical resources exist within the Central New Hampshire Region which are not detailed on the regional maps included in this *Inventory*. Each member municipality which chose to participate in the CNHRPC REPP has received a set of four 1" = 2000' maps. The first map is a paper base map and the remaining three are a series of thematic clear overlays. The **Geologic Resources Overlay Map**, explained above, consists of twenty foot topographic contours, summits, and any identified resources by local officials (mines, quarries, sand and gravel pits, kames, drumlins, eskers, etc.) The **Water Resources Overlay Map** is comprised of hydrography, watershed boundaries, National Wetlands Inventory wetlands, aquifers if available and floodplains if available. The **Land Resources Overlay Map** could be considered the most important overlay map in terms of preservation analysis. It consists of conservation lands, Natural Heritage Inventory buffered sites, and identified historical sites, cemeteries, cultural sites, ecological sites, agricultural land, recreation sites, etc. The majority of these specific resources are explained in detail in the appropriate *Municipal Profiles* section of each municipality.

These clear film overlay maps are intended to serve municipal officials by their ease of use. Different overlays can be used in conjunction with the paper base map to reveal where resources co-occur or where resources lie in relationship to other features. Maps such as these are intended to be informational tools to guide appropriate field study before any land use management decisions are made.

The **Natural Heritage Inventory** tracks threatened and endangered plant and non-game species in New Hampshire and compares them to the equivalent federal and global designations of threatened and endangered. Funded by the NH Department of Revenue and Economic Development, the program seeks to locate rare species and educate landowners of their existence. The hundreds of threatened and endangered species which live in the municipalities of the Central Region are listed in *Appendix E*.

Air quality is one of single-most important, yet often difficult to control, resources within the Region. Because of wind and weather patterns, much of the air that travels through the area originates from other states. Pollutants such as particulate matter and carbon monoxide affect both the environment and its people, plants, and animals. This life-giving resource has received wide-spread attention on the federal and state levels. The US Environmental Protection Agency (US EPA), through the Clean Air Act Amendments of 1990, sets emissions standards; the State Legislature itself has been addressing emissions testing for several years.

Despite the fact that some of the Region's air was not generated here, local population density and transportation play crucial roles in determining air quality in any given geographic area. In late 1998, the US EPA's measure for pollution, called the Pollutant Standards Index (PSI), measured the air quality in Merrimack County as between 50 to 100. While up to 50 is considered Good (no general health effects), 50 to 100 is considered Moderate (few or no general health effects). The more serious categories are 100 to 200 (Unhealthful), 200 to 300 (Very Unhealthful), and Over 300 (Hazardous). Other areas in New Hampshire, specifically the Seacoast Region and the Nashua Region, consistently experience PSI's far higher than those found within the Central New Hampshire Region.

Despite their limitation to development, hydric soils types are unique and valuable by their own

right. They harbor wetland-specific plant and animal species, provide flood control, and help filter contaminants from groundwater. Often, an unusual proliferation of biological diversity can be directly attributed to wetlands. Approximately 10% of the Central Region is covered by hydric soils:

TABLE 6

Hydric Soils Acreage by Municipality
(Merrimack County Conservation District 1979)

	Poorly Drained	Very Poorly Drained - Mineral Base	Very Poorly Drained - Organic Base	Marsh	TOTAL ACRES
Allenstown	982	616	145	24	1767
Boscawen	844	460	190	17	1511
Bow	1386	920	66	22	2394
Bradford	1279	648	231	170	2328
Canterbury	1678	955	170	160	2963
Chichester	1932	154	72	63	2221
Concord	4030	1286	1383	0	6699
Deering	0	0	0	0	0
Dunbarton	1238	1354	9	349	2950
Epsom	1749	409	315	77	2550
Henniker	1279	638	101	128	2146
Hillsborough	0	0	0	0	0
Hopkinton	2506	1383	650	200	4739
Loudon	3163	725	270	224	4382
Pembroke	1571	200	216	0	1987
Pittsfield	1551	176	0	0	1727
Salisbury	1390	836	260	0	2486
Sutton	1542	1040	324	108	3014
Warner	1375	594	348	82	2399
Webster	0	383	67	0	450
Wilmot	875	332	99	110	1416
TOTALS	30,370	13,109	4,916	1,734	50,129

The Towns of Deering and Hillsborough are the only two towns in the Region that reside within Hillsborough County. While Merrimack County has had sufficient funding to undertake a hydric soil survey for each of its municipalities, Hillsborough County has not; since data is not available for the two towns, their numbers are blank in **TABLE 6.** Without including Deering or Hillsborough, the acreage of hydric soils in the Region is 50,129.

The Region's rivers are a defining source of natural beauty, wildlife habitat, power generation,

and recreation. Numerous detailed inventories and publications are available on most of these rivers:

The Merrimack River flows for nearly 200 miles, beginning in the White Mountains and exiting into the Atlantic Ocean near Newburyport, Massachusetts. Uses of the river include hydroelectric power, waste assimilation, recreation, and indirectly for drinking water. In the Central New Hampshire Region, the Merrimack's banks touch Boscawen, Canterbury, Concord, Pembroke and Bow. Considered the most prominent river in the Region, the Merrimack River provides a strong sense of identity and invokes a great deal of pride. The Merrimack is one of two rivers in the Central Region which are in the Rivers Management and Protection Program.

The **Soucook River** is an exemplary "natural" river which has little shoreline development. Although its headwaters are in Gilmanton, the river begins to form itself in northern Loudon, then travels south to form the political boundary of Concord and Pembroke before it converges with the Merrimack in Bow. A study entitled *The Soucook River Reclamation Plan* is underway through the assistance of the NH DES and should be completed in 2000.

The **Suncook River** is responsible for the early industrial successes of Pembroke and Allenstown. Converging with the Merrimack River in Suncook Village, it bisects Pittsfield, travels south through a small portion of Chichester, and flows through the length of Epsom before it forms the political boundary of Pembroke and Allenstown.

The Contoocook and North Branch Rivers, collectively the second river in the Central Region within the Rivers Management and Protection Program, flows from Rindge north to Concord where it joins with the Merrimack River. An active Local Advisory Committee works to produce educational training and research sessions for school children and adults alike. The Contoocook and North Branch corridor provides a wide variety of habitat for a multitude of plant and animal species.

The **Warner River** is also a primarily undisturbed "natural" river. It bisects the Town of Warner, flows through the southwestern corner of Webster, and flows for a short distance in Hopkinton until it joins the Contoocook River. The Warner River offers a peaceful, scenic tour of forests, covered bridges, and old mill sites while riding on Class I and II rapids.

The **Blackwater River** is approximately 14 miles long and joins with the Contoocook River in Hopkinton. In Webster, a dam on the Blackwater is used for flood control. An annual recreational event, kayaking races, attract a large number of visitors to the Blackwater River in early spring. As the Blackwater Reservoir is federally owned, a variety of conservation and natural areas are present. In the Central Region, the river travels the entire lengths of Salisbury and Webster before entering Hopkinton and entering the Contoocook.

Spring 1998 Natural, Cultural, and Historical Resources Survey

In order to assess the priorities of the communities within the Central New Hampshire Region, as well as to focus on the primary issues of conservation concern, the Natural, Cultural, and Historical Resources Survey was developed. A total of 444 surveys were mailed with self-addressed stamped envelopes to the current Conservation Commission members and Chairs, Planning and Zoning Board Chairs, Boards of Selectmen Members, City Councilors, Administrators and Planners, Historic District Commission Chairs, Representatives to the Legislature, Executive Councilors, CNHRPC Commissioners, local environmental and historical non-profit organizations, and local river advisory committee (LAC) members of the Central Region. A return rate of about 15% (60 surveys) was acquired. *Appendix B* contains a copy of the survey which was distributed to the above parties. Respondents were given the opportunity to remain anonymous if they so chose; CNHRPC considers all results strictly confidential regardless of anonyminity status. The results of this survey gave valuable insights to the concerns of conservationists within the Central Region.

It is important to note that the results of the survey, regardless of which section has been ranked, are not statistically significant. The majority of the respondents were Conservation Commission members. This fact combined with the low return rate and with the overall bias of surveys (those who care about the issues will respond and those who do not care typically will not respond) means that although the results are informative and helpful, they may or may not accurately represent the concerns and priorities of the Central Region or its municipalities.

On the regional level these potential inaccuracies are not as great as those which will inevitably occur on the town level. At least one survey from each of the twenty-one municipalities of the Central Region was returned with the exception of one community. A total of 54 responses were received from municipalities by the specified deadline for tallying; the remaining 6 responses of the 60 surveys received were either late or were received from non-municipal representatives. However, late responses provided additional specific comments and resource priorities which were incorporated into the narrative of each *Municipal Profile*.

It should be strongly stated that each Town's resource priorities ranked within its *Municipal Profile* are subject to the small number of responses received for that individual **Town.** Those municipalities with a higher response rate will have a more accurate idea of what their resource priorities are.

Resource Priorities

Seven generalized resource categories were used to divide the resource types into logical groupings. Although it was realized that specific resources may be able to fall into more than one resource category, a method of standardization was necessary in order to measure the general importance of one resource over another within the same category:

+	Water Resources	1	Geologic Resources
2	Land and Forestry Resources	×	Public Facilities Resources
	Historic/Cultural Resources	*	Other Resources
В	Ecological Resources		

Respondents had the opportunity to suggest and rank additional resources within each category which were not pre-listed on the survey. The following table shows the average regional priorities based upon the survey results:

TABLE 7	General Regional Resource Priorities						
	1st	2nd	3rd	4th	5th		
Water Resources	Rivers and streams	Aquifers	Lakes and ponds	Designated prime wetlands	Watersheds		
Land and Forestry Resources	Open spaces	_		Town parks and forests	Deeded conservation lands		
Historical and Cultural Resources	Cemeteries	Cultural interest sites	Covered bridges	National Register of Historic Places sites	Archaeo- logical sites		
Ecological Resources	Scenic vistas	Plant and tree communities & Greenway corridors (tie)		Riparian corridors	Biodiversity		
Geologic Resources	Mountains and hills	Soils Sand and identification gravel deposits		Bluffs	Gorges		
Public Facilities Resources	Recreational trails	Canoe and Outdoor sporting fields		Picnic areas and playgrounds	Beach access		
Other Resources	Hunting and sporting clubs	Citizen education	Air	Seasonal Tourism	Climate		

Approximately ten (10) surveys were received after the above tally was completed. These late surveys were not included in the Regional Resource Priorities average, but because of their importance on the local level, specific comments were recorded within the appropriate *Municipal Profile*.

Measure of Resource Protection

Respondents were asked if they felt their local ordinances and regulations adequately protected each resource category:

TABLE 8	Opinions on Adequacy of Local Protection
	· · · · · · · · · · · · · · · · · · ·

	Yes	No	No Answer
Water Resources	27	30	3
Land and Forestry Resources	26	32	2
Historical and Cultural Resources	22	27	11
Ecological Resources	17	29	14
Geologic Resources	19	36	17
Public Facilities Resources (availability of resources also inferred)	29	15	16
Other Resources (availability of resources also inferred)	16	22	22

In order to keep the questions measured and standardized, the categories of Public Facilities Resources and Other Resources were also asked the question about protection adequacy. From the written comments of the respondents, it has been inferred that the availability of such resources to the public, as well as their protection where possible under local regulation, were considered when responding. For the *Municipal Profiles* section, Public Facilities Resources has been condensed into the more specific category of Recreational Resources.

Recent Conservation Activities

Respondents were asked to list which activities they or their group have been involved in within the last three years. This question was asked to ascertain the activities which are the most important conservation undertakings within the Central Region. Following is a brief but complete composite listing of these different types of projects:

- sometimes of the roadside and riverside trash pick-ups
- neighborhood beautification (tree plantings)
- nembership in local and national conservation organizations
- overlay mapping of resources
- communication with other town boards
- master plan updating
- some conservation easement acquisition
- conservation fee-owned land purchase
- duck box erection and monitoring
- wetlands applications review
- trail development, maintenance, and mapping
- © conservation studies with assistance from student interns
- local watershed natural resources inventory
- public education and awareness workshops/tours/field trips/events
- hosting intermunicipal activities
- legislation lobbying
- water quality and invertebrate sampling
- recycling opportunities research
- renovations and creations of town beaches and boat access areas
- for trails, viewing platforms, protection of unique areas
- local regulation and ordinance proposals and changes
- creation of a boardwalk
- town-wide natural resources inventory

Upcoming Conservation Activities

Respondents were also asked to list which activities they or their group plan to be involved in within the next three years. These anticipated activities are quite similar to the accomplishments of the previous projects. Again, following is a brief but complete composite listing of these different types of activities:

M public, conservation commission, voter, and town board education

M acquiring conservation easements

M conservation land fee-owned purchases

M recreational trail development, maintanance, and accessibility

M ordinance and regulation changes (cemetery easements, aquifer protection)

M master plan update

M creation of a capital reserve fund for the conservation commission

M identification and inventory of important ecological lands

M acquiring funding for personnel to support volunteer conservation efforts

M open space inventory

M create canoe access areas

M town natural resources inventory

M relandscaping of public lands

M public activities/road races/tours

M study, delineation, and mapping of prime wetlands

M repair pond dams

M implement existing management plans

Regional Conservation Committee

Throughout the survey process, education and communication were continually stressed as critical to the protection of any resource. Knowing that natural resources do not recognize municipal boundaries, regional participation to recognize and protect these and other resources are essential to the successfulness of their protection. Not just individuals affiliated with municipalities were surveyed for this very reason; cooperation is necessary from all interested parties and all should be given the opportunity to be heard. To that end, when asked if a respondent would be willing to join a Regional Conservation Committee, the results were as follows:

If a Regional Conservation Committee were created to address conservation issues on a regional level (includes non-profits, LACs, historical societies, town boards, etc), would you be interested in becoming a member?

(28) Yes

(11) Maybe

(14) No

(7) No answer

Municipal Profiles

Each municipality in the Central New Hampshire Region has a *Municipal Profile*. These profiles, which are derived from book research, recent statistical information, new inventories, and local conservationists and historians, inventory the natural, cultural, and historical resources of each community. In order to achieve an information base that can be easily understood and utilized, the *Profiles* are also standardized. They each contain identical categories and subcategories to facilitate data gathering and reporting.

However, the similarities end there. Each municipality has its own history, assets, priorities, and stories to tell through its *Profile*. A series of meetings was held during the late spring and early summer to collect the most important information available: local knowledge. Hosted by the Deering, Boscawen, Concord, Pittsfield, and Dunbarton Conservation Commissions, all local officials in the Central New Hampshire Region were invited to participate through post card invitations and newsletters. Other municipal representatives met on an individual basis with CNHRPC.

After the *Profiles* were drafted in the summer of 1998, Boards of Selectmen, Planning Boards, Conservation Commissions, and Historical Societies were invited, by post card and newsletter mailings, to preview and improve their own *Profile*. Several Conservation Commission and Historical Society volunteers took up the challenge and have provided many dedicated hours to reviewing, adding, and correcting the *Profile* which was created by CNHRPC.

Again, this *Inventory* is to be considered an on-going document subject to review and revision. Comments, additions, or corrections are encouraged and will be incorporated into the next version of this *Inventory*. References are cited on the very last page of each individual *Municipal Profile* to aid in this capacity.

ALLENSTOWN

About Allenstown	
Member of CNHRPC	×
Surveys Mailed	18
Surveys Received for Tallying	1
REPP Meeting Participation	√
Profile Review & Comment by	*

Historical Profile

Allenstown owes its name to Samuel Allen, a Massachusetts man who served as governor during the late 1600's. In 1722, a tract of four square miles was granted to his children in the area we now call Allenstown. The area was not incorporated as a New Hampshire town until 1831, more than one hundred years after the original land grant. The earliest settlements grew along the Suncook River and in the eastern part of the Town where an abundance of useful timber and brooks helped facilitate the building process. In 1759, part of Allenstown's territory was annexed by Pembroke, and in 1798 disputes erupted over which town could care best for the Suncook River. It appeared that Pembroke's citizens had neglected the waterway and its facilities, and Allenstown was willing to take on the task of caring for it. Today the two towns share the river, Allenstown looking after the east bank and Pembroke looking after the west. The two towns also share the Suncook Village area, and citizens from both towns use it as a shopping and social center. ¹

Present-Day Profile

The area of Allenstown is 13,184 acres, or 20.6 square miles. The Town comprises 2.6% of the CNHRPC area. ²

Over the last twenty seven years, Allenstown's population has grown by 77% while the number of housing units has increased by 133%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	<u>Net C</u> #	Change %	
1970 (US Census)	2732	na	na	852	na	na	
1980 (US Census)	4398	+1666	+ 61.0	1592	+740	+ 86.9	
1990 (US Census)	4649	+251	+ 5.7	1868	+276	+ 17.3	
1997 Population & 1996 Housing (NHOSP)	4823	+174	+ 3.7	1981	+113	+ 6.0	
TOTAL CHANGE FROM 1970 - 1997		+ 2091	+ 76.5%		+ 1129	+ 132.5%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Open Space and Farming	Floodplain Development Ordinance (1993)
Residential 2 (outside the region supplied by town water)	Shoreland Protection Ordinance
Business	Hazardous Materials Cleanup Ordinance
Industrial	Solid Waste Management Ordinance
Commercial/Light Industrial	Mobile Home Ordinance

Non-regulatory measures for protecting Allenstown's resources include the following: ^{7,8,9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Community Profile Element (1997 draft)	Bear Brook State Park Management Land Plan (1994)
Strategic Statement and Development Goals Element (1997 draft)	
Transportation Element (1997 draft)	
Community Facilities Element (1997 draft)	
Land Use and Natural Resources Element (1997 draft)	
Housing Element (1997 draft)	
Conservation and Preservation: Historic and Natural Resources (1997 draft)	
Community Facilities and Services Element (1997 draft)	

TOWN RESOURCES



Water Resources

Water Supplies

Pembroke, Hooksett, and Allenstown all depend on the Pembroke Water Works for their public water supplies. Municipal water lines bring water to all of the Allenstown's urban streets lying west of Route 3. Other major lines exist along River Road, Bartlett Street, Sargent Street, Route 28 to Suncook Business Park and Granite Street to Chester Turnpike. Municipal water is tapped from wells next to the Suncook River. Other public water supplies include three at Bear Brook Villa (serving 385), two at Bear Hill 4-H Camps (serving 125), two at Holiday Acres (serving 375), and one at Bear Brook Gardens (serving 225).

Between 1983 and 1997, the NHDES issued seventy-two well permits to residents of Allenstown. Many of these private wells are located in the northeast corner of Town on roads leading north off of Deerfield Road. Other private wells serve housing units located along the Suncook River.¹⁰

Ponds ^{11, 12, 13, 14}

Bear Hill Pond is 33 acres in size with an average depth of 11 feet. It serves as a tributary to Boat Meadow Brook.

Catamount Pond has an area of 16 acres with an average depth of eight feet. It is also called Bear Brook Pond and it serves as a tributary to Bear Brook.

Allenstown shares Hall Mountain Pond and marsh with Hooksett and Candia. Twenty-five acres of this water area lie within Allenstown. It has an average depth of only three feet and serves as a tributary to Bear Brook.

Smiths Pond is another swampy pond with an average depth of two feet. This nine-acre pond is located in Bear Brook State Park.

The Suncook River forms the border between Allenstown and Pembroke. The river runs the length between the two towns and makes its way into the Merrimack.

The Merrimack River, formed upstream by confluence of the Pemigewassett and Winnipesaukee Rivers in Franklin, flows for a short while in Allenstown. It flows for a few hundred yards along Allenstown's western border and separates the Town from Bow and from Hooksett.

Brooks 11, 12, 13, 14

Catamount Brook flows out of Bear Brook and passes through wetlands.

Little Bear Brook flows across the northern part of Allenstown.

Boat Meadow Brook flows out of Bear Hill Pond.

Bear Brook flows out of Catamount Pond and runs east into Deerfield.

Pease Brook flows in the northeast corner of Allenstown, just west of the Deerfield-Allenstown town line.

Hydric Soils

Out of the total land acreage of Allenstown (13,184), 13.4% is comprised of hydric soils: ³²

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	982	7.4
Very Poorly Drained - organic base	616	4.7
Very Poorly Drained - mineral base	145	1.1
Marsh	24	0.2
TOTALS	1767	13.4

Watersheds

Allenstown lies almost entirely within the Suncook River watershed. The Merrimack River watershed encompasses a small southern section of the Town.¹⁰

Aquifers

A sand and gravel aquifer underlies a pocket of land near the convergence of Bear Brook and the Suncook River. Municipal water is tapped from this supply.¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found along Catamount Brook and Boat Meadow Brook. ¹⁷

Identified Water Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan and Town officials named the following water resources as being particularly important to the Town: ^{28, 33}

- → Old Company Swamp
- → Catamount Brook
- → Smith Pond
- → Little Bear Brook
- → Black Barn Swamp
- → Catamount Pond
- ♦ Old Floyd's (Black) Brook
- → Boat Meadow Brook
- → Bear Hill Pond
- → Spruce Pond
- ✦ Pease Brook
- → Bear Brook

- + Suncook River with its associated aquifer, floodplain, and historic sites
- + Floodplain/wetland on undeveloped land along Route 28

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Allenstown. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Allenstown	Region
First Priority	Aquifers	Rivers and streams
Second Priority	Public water supplies	Aquifers
Third Priority	Watersheds	Lakes and ponds
Fourth Priority	Floodplains	Designated prime wetlands
Fifth Priority	Other wetlands	Watersheds

Specific comments included: 31

- + We should compare notes with other Towns. The Suncook River with its associated aquifer, floodplain, and historic sites should be protected.
- + The floodplain/wetland induced undeveloped land along Route 28 should be protected.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 71% of the entire Town. The following table breaks down the components: 8, 20, 21, 22

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Allenstown Elementary School Grounds	Town	7
Allenstown Park	Town	3
Allenstown Town Forest	Town	
Allenstown Upper Elementary School Grounds	Town	1
Archery Pond Dam Buckhead	NH F&G	1

Bear Brook State Park	NH DRED	6740
Buck Street Dam	NH Water Resources Council	1
Cold Spring Pond Dam Site	NH F&G	3
Current Use		2620
TOTAL ACREAGE PROTECTED		9376

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 Allenstown Town Forest
- 2 Bear Brook State Park

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Allenstown. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Allenstown	Region
First Priority	State parks and forests	Open space
Second Priority	Open space	Agricultural land
Third Priority	Deeded conservation lands	Conservation easements
Fourth Priority	Town parks and forests	Town parks and forests
Fifth Priority	Agricultural land	Deeded conservation lands

Specific comments 31

2 A review of current ordinances is needed; Bear Brook State Park should be protected.





Historical and Cultural Resources

National Register of Historic Places

Allenstown has two exemplary sites located on the National Register. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1,24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Pembroke Mill	1985	100 Main Street	
Bear Brook Civilian Conservation Corps (CCC)	1992	Bear Brook State Park	oldest remaining CCC camp in existence

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Allenstown currently has no sites listed with the New Hampshire Division of Historic Resources.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other historic landmarks and events: 1, 8, 18

- A 19th century Sugar House is located on Ring Road.
- Rock quarried from Bailey's Quarry (located off River Road near Pickney Hill) was used to make curbing and cobblestones.
- Native American arrowheads have been found at the site where the Suncook River joins the Merrimack.
- The remains of a late 18th century cellar hole has been found on Pickney Hill, and the foundation of an old plumbing station is located on Bold Meadow Brook.
- A rope ferry raft route was located on the Suncook River near the present location of Ferry Street.
- Two of the oldest cemeteries in Allenstown are located near Bear Brook State Park. They contain gravestones dating back to the Revolutionary War.
- The Allenstown Meeting House was constructed around 1835 on land that is now part of Bear Brook State Park. The building served as a religious, government and social center.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Allenstown no longer has standing covered bridges, the Town once shared three with Pembroke: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Main Street	unknown	unknown
Osgood, Turnpike	unknown	unknown
RR	unknown	1970

Cemeteries

As do many other small Central Region towns, Allenstown has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 9, 18, 33}

CEMETERIES	Owner	Parcel Number / Location
Civil War Batchelder Cemetery	private	intersection of Mount Delight Road and Deerfield Road
Cemetery by Catamount Pond	private	south of Deerfield Road
Clark Burial Ground	private	Pioneer Trail in Bear Brook State Park
Evans-Batchelder Cemetery	private	before Podunk Road
Burgin Family Cemetery	private	across from Old Allenstown Meeting House
St Jean the Baptist		Granite Street

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ^{18, 33}

- Old Meeting House
- Bailey's Quarry
- China Mills
- cemeteries
- old railroad bed
- Buck Street Island on the Suncook

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Allenstown. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Allenstown	Region
First Priority	National Register of Historic Places	Cemeteries
Second Priority	Mill Sites	Cultural interest sites
Third Priority	Cemeteries	Covered bridges
Fourth Priority	Museums	National Register of Historic Places
Fifth Priority	Cultural interest sites	Archaeological sites

Specific comments 31

Buck Street Island on the

Suncook should be protected.



B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Allenstown since the 1930's as well as one outstanding natural community and recorded NHI program's database. ²⁷

A Dry Central Hardwood Forest on Acidic Bedrock or Till is a natural community that has been located at one location in Allenstown. Only 11 other such communities have been reported in the state during the last twenty years.

The Small Whorled Pogonia (Isotria medeoloides) is listed as an endangered species in New Hampshire and is threatened in the rest of the country. One location in Allenstown has reported harboring this plant.

Allenstown has reported two locations that harbor Sweet Golden Rod (Solidago odora). Only 10 other New Hampshire locations have reported this plant within the last 20 years.

Great Blue Herons (Ardea herodias) are large striking birds that nest by marshes and ponds. One rookery has been sited in Allenstown.

The Timber Rattlesnake (Crotalus horridus) is endangered in the New Hampshire, but it is not listed as such federally or globally. Only four locations have been reported in the State, two of them in Allenstown.

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been sited in Allenstown only once within the last 20 years.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Allenstown: 15, 18 19

A large riparian corridor is located along the Merrimack River which forms only a small part of the western boundary of the Town.

An important utility corridor runs across the northern section of Town. Another utility corridor runs for a short distance along the Merrimack River.

The Bear Brook State Park marks the western end of a large corridor spanning to its eastern end at Pawtuckaway State Park in Nottingham. An effort known as the BearPaw Regional Greenway was spearheaded by conservation professionals and the group continues to expand this exceptionally important corridor, which is perhaps the largest and richest habitat in the southern portion of the State.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Allenstown: ¹⁸

Bear Brook State Park covers about half of Allenstown's area and provides protection for many natural resources. Deer, moose, red fox, coyote, bear, porcupine, otter, and piliated woodpecker are some of the many different animal species that have been sighted. The Park's ponds, woodlands, marshes, and fields offer Allenstown's wildlife a diverse environment.

Hall Mountain Marsh offers critical wetland habitats for a variety of sensitive plant and animal life. It is overseen by the NH Fish and Game Department, and is monitored so as to maximize the nesting and breeding of waterfowl.

Beaver colonies have been sighted at Catamount Pond.

Timber is harvested at an ecologically wise rate throughout Bear Brook's forests.

Forests and woodlands also provide important habitats for wildlife. Softwood stands offer wintering areas for deers, and scarred beech trees indicate repeated climbing by bears.

Scenic Roads and Vistas

Bear Brook State Park has many roads that pass through a variety of terrains offering pleasant views of ponds and wooded groves. Trails for walking, hiking, biking and snowmobiling also offer scenic vistas. ¹⁴

Identified Ecological Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following ecological resources as being particularly important to the Town: ²⁸

- B Pease Brook
- B Hayes Marsh
- B Archery Pond
- B Hall Mountain Marsh
- B Bear Brook
- B Catamount Pond
- B Spruce Pond
- B Smith Pond
- B Cold Spring Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Allenstown. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Allenstown	Region
First Priority	Greenway corridors	Scenic vistas
Second Priority	Natural Heritage Inventory sites	Plant/tree communities (tied w/3rd)
Third Priority	Biological diversity	Greenway corridors (tied w/2nd)
Fourth Priority	Plant/tree communities	Riparian corridors
Fifth Priority	Animal communities	Biological diversity

Specific comments 31

B no additional comments were provided



1 Geologic Resources

Surficial Geology

Glacial erratics dominate the eastern section of Allenstown's Bear Brook State Park. Gloucester sandy loam and the Chatfield-Hollis-Canton complex are the two most frequently mapped soil series within Town. ¹⁴

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Hall Mountain	925'
Bear Hill	800'
Catamount Hill	700'
Pinkney Hill	700'

Bedrock Geology

Granite is still collected from Bailey's Granite Quarry on New Quarry Road. Gravel pits are located along gravel River Road. ^{14, 18}

Identified Geological Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan and Town officials named the following geologic resources as being particularly important to the Town: ^{28, 33}

- 1 Bailey's Granite Quarry and its associated high ground
- 1 Kettle rock
- 1 White Cape Ledge and Wing Road Ledges

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Allenstown. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

Allenstown	Region
Mountains and hills	Mountains and hills
Sand and gravel deposits	Soils identification
Eskers, kames, and drumlins	Sand and gravel deposits
	Mountains and hills Sand and gravel deposits

Fourth Priority	ity Mining sites Bluffs			
Fifth Priority	Soils identification	Gorges		

Specific comments 31

1 The high ground associated with Bailey's Quarry should be protected.

X Recreational Resources

A variety of recreational opportunities and resources exist in Allenstown that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: $^{18, 29, 30}$

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Allenstown Elementary School Grounds	public	Suncook Village	7 acres
Allenstown Upper Elementary School	public	Suncook Village	3 acres
Allenstown Park	public	Suncook Village	1 acre
Cheer Center	private	Suncook Village	2 acres
Pine Haven Boys Center Grounds	private	off River Road	21 acres
Cold Spring Pond	public	Bear Brook State Park	3 acres
Allenstown Town Forest	public	northeast of Cold Spring Pond	
Merrimack River Boat Launch	public	west of Suncook River, on the Merrimack	3 acres
Bear Brook State Park	public	central Allenstown	6740 acres
Bear Brook State Park (hiking trails)	public	Bear Brook State Park	20 miles
Maple Grove Park Campground	private		14 acres
Bear Hills 4-H Camps (2)	private		

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: 18

★ Blueberry Express Park

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Allenstown. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Allenstown	Region
First Priority	Recreational trails	Recreational trails
Second Priority	Canoe/boat access	Canoe/boat access



Third Priority	Outdoor sporting fields	Outdoor sporting fields
Fourth Priority	Picnic areas and playgrounds	Picnic areas and playgrounds
Fifth Priority	Kiosks, shelters and boardwalks	Beach access

Specific comments

X no

additional

31

comments were provided

Other Identified Resource Priorities

No additional resources or priorities have been identified by the Town. ^{18, 33}

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Allenstown has recently established a Conservation Commission, a Beautification Committee, and a Parks and Recreation Department.

Conservation Commission

In 1997, Allenstown voted to create a Conservation Commission which would oversee the protection of Allenstown's natural resources. The first year of operation has been largely organizational, and the committee has concentrated on creating their budget and identifying their future goals.

Beatification Committee

The Allenstown Beautification Committee was formed in an effort to beautify the Town grounds while retaining the historic charm of the area. A handsome gazebo was recently dedicated to the Allenstown, and the Committee continues to oversee a number of summer gardens.

Parks and Recreation Department

In 1998, the Town voted to create this Department. Comprised of energetic volunteers and armed with a solid budget, the group will be focusing on creating recreational opportunities for youth and seniors in Allenstown. Their first large project will be the creation of a summer/winter skating rink.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Allenstown's response to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

Production of a Natural Resources Inventory

Essential Factors to Allenstown's "Quality of Life"

M small-town closeness in the western part of Town

M back-road quietness in the eastern part of Town open spaces and greenways

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Bear Brook State Park Management Plan, 1994
- 7 Town Officials/Employees, 1998
- 8 Allenstown Town Annual Report, 1997
- 9 Allenstown Master Plan Draft, 1997
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Allenstown Master Plan, 1997
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 (reserved)
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Allenstown Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979
- 33 Allenstown Conservation Commission

BOSCA WEN

About Boscawen	
Member of CNHRPC	✓
Surveys Mailed	23
Surveys Received for Tallying	4
REPP Meeting Participation	✓
Profile Review & Comment by	✓

Historical Profile

Boscawen was first settled in 1733 and was known as Contoocook. Renamed for the 18th century war hero Lord Edward de Boscawen of England and incorporated in 1761, the Town encompassed both Boscawen and the area now known as Webster. The Town originated as a series of small settlements, such as Gerrish, Boscawen Plains, and Penacook, along the Merrimack River and the Boston and Maine Railroad. Two areas of denser settlement emerged, Penacook and Valley of Industry. Both areas reflect the importance of water power to early industry and the typical pattern of residential and commercial development. The interior of Boscawen reflects a more agricultural oriented settlement pattern with large acreage homesites and farms predominating. The division of Boscawen and Webster in 1860 formed the boundaries known to us today. ¹

Present-Day Profile

The area of Boscawen is 16,256 acres, or 25.4 square miles. The Town comprises 3.1% of the CNHRPC area ²

Over the last twenty-seven years, Boscawen's population has grown by 14% while the number of housing units has increased by 42%: ^{3, 4, 5}

GROWTH	Population	<u>Net</u> #	Change %	Housing Units	Net C	Change %	
1970 (US Census)	3162	na	na	897	na	na	
1980 (US Census)	3435	+273	+ 8.6	1114	+217	+ 24.2	
1990 (US Census)	3586	+151	+ 4.4	1221	+107	+ 9.6	
1997 Population & 1996 Housing (NHOSP)	3616	+43	+ 1.2	1275	+54	+ 4.4	
TOTAL CHANGE FROM 1970 - 1997		+ 454	+ 14.4%		+ 378	+ 42.1%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Agricultural/Residential	Floodplain Development Ordinance
Residential 1 - Low Density	Cluster Development Ordinance
Residential 2 - Medium Density	Telecommunications Ordinance
Commercial	
Industrial	

Non-regulatory measures for protecting Boscawen's resources include the following: ^{7, 8, 9}

Town Master Plan Elements

Special Conservation Plans, Reports and Studies

Goals and Objectives (1988)	Town Forest Management Plan
Capital Improvements Program (1989)	Strategic Plan of the Boscawen Conservation Commission
Transportation (1989)	
Community Facilities (1988)	
Land Use (1988)	

TOWN RESOURCES



Water Resources

Water Supplies

Until recently, Walker Pond served as the Town's water supply; private and water precinct wells currently provide water to the residents of Boscawen. Walker Pond, approximately 190 acres in size and having an average depth of 18 feet, has a motor restriction to less than six horse-power. Walker Pond is shared with Webster and it comprised the Penacook/Boscawen water precinct. This former public surface water supply, off of Chadwick Hill Road, once served a population of up to 3,500. ^{10,32}

Between 1983 and 1997, the NHDES issued 43 private well permits to residents of Boscawen. The majority of them occur on Queen Street (20) and Corn Hill Road (10). These new well locations have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13, 14

Patenaude's Pond, located on land owned by the Tamposi Company, Inc, has a size of approximately 70 acres. The average depth of the pond is 15 feet. There is no public access to this pond.

Flander's Pond is approximately 15 acres in size, with an average depth of four feet. This pond's drainage forms Tannery Brook.

Little Pond is 5.8 acres in size, although a minority of its area (1.4 acres) lies within Boscawen.

The Merrimack River, formed upstream by confluence of the Pemigewassett and Winnipesaukee Rivers in Franklin, flows for 10.4 miles in Boscawen. Forming the boundary between Boscawen and Canterbury, the River is known for its many wild characteristics and varied public recreation opportunities.

The Contoocook River flows for only 0.9 miles through Boscawen as it joins with the Merrimack at the southeastern part of Town.

Tannery Brook flows for 3.1 miles into the Merrimack River. Its tributary, Cold Brook, flows for two miles.

Glines Brook flows for 1.4 miles into the Merrimack River.

Beaver Dam Brook begins in Salisbury, flows through Little Pond, and drains into Walker Pond. Exiting Walker Pond, the brook flows through marshlands and eventually finds its way into Pillsbury Lake. This brook forms the majority of the Boscawen/Webster political boundary.

Hydric Soils

Out of the total land acreage of Boscawen (16,256), 9.4% is comprised of hydric soils: ³³

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	844	5.2%
Very Poorly Drained - organic base	460	2.8%
Very Poorly Drained - mineral base	190	1.3%
Marsh	17	0.1%
TOTALS	1,520	9.4%

Watersheds

The Town lies approximately 2/3 within the Upper Merrimack River watershed and 1/3 within the Lower Contoocook watershed. ¹⁰

Aquifers

A small portion of an aquifer underlies the southern portion of Town, near the Concord boundary line and the Contoocook River. A larger aquifer portion is located at the boundary of Boscawen and Webster along the Beaver Dam Brook from Franklin to Beaver Dam Brook headwaters. Water precinct wells tap into these water sources at various locations. ^{16, 32}

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found along Tannery Brook, off of Corn Hill Road, within the Tamposi parcel, and off of Queen Street. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- + the unnamed beaver pond on Pierce land off of Queen Street
- + Patenaude's Pond, 70+ acres, off of Queen Street and its undeveloped woodland frontage
- → Walker Pond and its frontage
- ✦ Couch Pond (aka Little Pond)
- ✦ Flander's Pond
- → Hirst Marsh
- + Merrimack River, with its shorelands, tributaries, and floodplains
- → Cold Brook
- **♦** Tannery Brook
- → new Town water precinct wells

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Boscawen. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Boscawen	Region
First Priority	Rivers and streams	Rivers and streams
Second Priority	Aquifers	Aquifers
Third Priority	Public water supplies	Lakes and ponds
Fourth Priority	Lakes and ponds	Designated prime wetlands
Fifth Priority	Floodplains	Watersheds

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their water resources. ³¹

Specific comments included: 31

+ The Merrimack River is our greatest resource.



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 82% of the entire Town. The following table breaks down the components: $^{8, 20, 21, 22}$

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Boscawen Town Forest	Town	443
Cabot easement	Town	14
Cabot Memorial Forest	SPNHF	57
Cabot-Taylor Lot	Town	67
Cummings (formerly Sahlin) property (LCIP)	Town	141
Fisher Parcel	Town	6
Greenspace off of Sweatt Street	Town	1
Hannah Dustin Historic Site	NH DRED	1
Hannah Dustin Historic Site	Town	5
Hirst-WMA Hirst	NH F&G	115
Hirst-WMA Miller	NH F&G	25
Hirst-Brockway Marsh	NH F&G	16
Jones (formerly Emery) property (LCIP)	Town	33
Merrimack County Farm	NH DA	600
Merrimack River State Forest	NH DRED	57
Miller Lots - Town Forest	Town	5
Outdoor Education Area	Town	70
Prince Pasture (shared w/Webster)	SPNHF	92
Sanborn Agriculture Preserve (shared w/Salisbury)	NH DA	261
Schildbach easement	Town	20
State Forest Nursery	NH DRED	887
Town of Boscawen Land	Town	5
Town Forest Lot	Town	4
Woodman Forest	Town	93
Current Use		10329

TOTAL ACREAGE PROTECTED	13347	
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In 1998, Boscawen supported a 50% land use change tax allocation, with a \$10,000 cap, to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: 18

- 2 Merrimack County Farm's woods and fields between Routes 3 and 4
- 2 1000-acre undeveloped land, with an undeveloped pond, owned by the Tamposis
- 2 all lands abutting the Town forest
- 2 farms along King & Water Streets
- 2 New Hampshire State Forest on DW Highway
- 2 Boscawen Town Forest on Queen Street
- 2 Cabot Forest on High Street
- 2 all protected conservation lands
- 2 open spaces in northern Boscawen
- 2 railway corridor along the Merrimack River
- 2 Merrimack River State Forest remnants

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Boscawen. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: 31

RESOURCE PRIORITIES	Boscawen	Region
First Priority	Agricultural land	Open space
Second Priority	Open space	Agricultural land
Third Priority	Town parks	Conservation easements
Fourth Priority	Conservation easements	Town parks and forests
Fifth Priority	Deeded conservation lands	Deeded conservation lands

Half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. ³¹

Specific comments 31

2 We are in an area that may be developed quickly; therefore awareness of open space is critical.





Historical and Cultural Resources

National Register of Historic Places

Boscawen has five exemplary sites located on the National Register, all of which were nominated and listed in the 1980's. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Boscawen Academy	12/80	King Street	Currently houses Historical Society's main museum (built in 1827, formerly the Elmwood Academy)
Much-I-Do Hose House	12/80	King Street	Currently houses Historical Society's secondary museum and Post Office
Boscawen Public Library	5/81	King Street	Currently houses Town Library
First Congregational Church	4/82	High Street	Currently Congregational Church (built in 1799, has been positioned on three different spots on the site to present day)
Morrill-Lassonde House aka First Fort	3/84	East of King Street	Currently houses NH Art Association Gallery (former Reverend Robie Morrill property, oldest wood frame house built in 1769)

Historical Markers

One of the most well-known historical sites in Boscawen is the Hannah Dustin Memorial. In 1697, Hannah Dustin (1657-1737) was taken hostage by Native Americans in Haverhill, Massachusetts and taken to a camp site on the Merrimack River in Boscawen. She was able to escape her captors by killing and scalping ten of them, while rescuing two other captives. A New Hampshire commemorative marker, set in 1967, is located at the 0.4 acre Hannah Dustin Memorial parking area on the NH Routes 3 and 4 bypass over the Merrimack River. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- Contoocook Fort, 100 square feet in area, was built on the Merrimack River in 1739.
- Queen Street Fort, 110 square feet in area, was erected on Queen Street in 1752.
- First Meetinghouse was built in 1739, its marker residing in Plains Cemetery.
- Woodbury Plains Meetinghouse was built in 1782, its marker residing near Maplewood Cemetery.
- Town pound, less than one acre in size, is located on North Water Street at the

- intersection of Long, Water, and North Water Streets.
- Dix Home was the birthplace of General John Adams Dix, a Civil War hero and for whom Fort Dix in New Jersey was named. The building also served as the first law office of Daniel Webster in 1805. This home is unique in that it has two historical markers identifying the site.
- Jeremiah Burpee and John Osborne were two famous potters and brickmakers around 1820. The Burpee site lies near a junction on the former Andover Road (now Corn Hill Road), and the Osborne pottery works was located in a house next to Plains Cemetery.
- The Stratton Company Flour and Grain Mill was once the largest flour mill in New England. The wooden chutes that led from silos from the fifth floor still contained some grains in 1953, when the buildings were purchased by Allied Leather.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Boscawen no longer has standing covered bridges, seven once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Twin #1	1850	1899
Twin #2	1850	1954
Near Dustin Station	unknown	unknown
RR #13, North Channel	unknown	1921
RR #12, South Channel	1867	1920's
Rainbow	1857	1907
Stirrup Iron	unknown	1875

Cemeteries

As do many other small Central Region towns, Boscawen has a rich heritage and a strong connection to its past. Cemeteries, both town and small, private family plots, are an important and personal link: ^{8, 18, 32}

CEMETERIES	Owner	Parcel Number / Location
Maplewood Cemetery	Town	Map 47, Lot 38-A
Plains Cemetery	Town	Map 81-A, Lot 23-A
High Street Cemetery	Town	Map 49, Lot 24-A
Pine Grove Cemetery	Town	Map 81D, Lot 44-A
Beaverdam Cemetery	Town	

NH Veterans Cemetery	State	Daniel Webster Highway, north of Circle Drive
Gobkin Family Cemetery	private	North Water Street, north of Long Street (East)
Call Family Cemetery	private	North Water Street, north of Long Street (West)
Elliott Family Cemetery	private	North Water Street, north of Long Street (West)
Marden Family Cemetery	private	off of High Street, north of Cathole Road
Poor Farm Cemetery	private	off of High Street, near Salisbury border (unable to locate presently)
Cemetery	County	behind Merrimack County Jail

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ^{18, 32}

- acemeteries on North Water Street
- acemetery behind Merrimack County jail
- small family cemeteries
- and old Town Meeting House site on Water Street
- Native American arrows found on top of the hill, on a large ledge, on Queen Street
- old Boscawen elementary school building, formerly Penacook Academy
- NRHP sites (Library, Much-I-Do Hose House, Congregational Church, Boscawen Academy and Morrill-Lassonde house aka First Fort site)
- present-day NH Art Gallery Association
- old "veterans" lots behind Maplewood Cemetery on Water Street
- and old farming properties
- acellar hole at old mill site on Cabot property
- historic railway corridor
- Town pound on North Water Street
- stone walls
- 1734 ox-cart way near the intersection of North Main Street and King Street
- ail mill off Stirrup Iron Road, on south branch of Stirrup Iron Brook
- the entire length of King Street and its abutting land
- Kettle & Crane Inn building and other old houses
- old bridge over Merrimack River from Boscawen to Canterbury
- "Indian Rock" at Colby farm
- Town-meeting form of government with historical sensitivity
- potential historical and archaeological sites on the Tamposi property

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Boscawen. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Boscawen	Region
First Priority	National Register of Historic Places	Cemeteries
Second Priority	Museums	Cultural interest sites
Third Priority	Mill sites (tied)	Covered bridges
Fourth Priority	Cemeteries (tied)	National Register of Historic Places
Fifth Priority	Cultural interest sites, stonewalls, cellar holes (all tied)	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

Changes in zoning are needed to cultural issues.



more adequately address historical and

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Boscawen since the 1930's as well as one outstanding natural community and recorded NHI program's database. ²⁷

The Flatstem Pondweed (potamogeton zosteriformis) is threatened in New Hampshire, but not listed as such federally or globally. Only two locations in the state within the last twenty years have been reported to harbor this plant, and the last occurrence in Boscawen was in 1946.

A natural community valued as extremely high in importance is the terrestrial community Floodplain Forest along the Merrimack River. The state has only twenty-three other such communities.

The invertebrate mollusk Brook Floater (Alasmidonta varicosa) is listed in the state as endangered. Only one occurrence in Boscawen within the last 20 years has been recorded.

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been sited in Boscawen only once within the last 20 years.

Fowler's Toad (Bufo folseri) has not been sited in Boscawen within the last 20 years. Little additional data is available on the Fowler's Toad at this time.

The elusive Pied-Billed Grebe (Podilymbus podiceps) is listed as endangered in the state and has only been reported in Boscawen once within the last 20 years.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Boscawen: 15, 18 19

A large riparian corridor is located along the Merrimack River which forms the entire eastern boundary of the Town, spanning 10.4 miles. The majority of the Merrimack corridor north of Jamie Welch Park is wild and undeveloped, while the southern portion within Boscawen contains commercial, agricultural, or industrial activity as well as undisturbed habitat.

The Boston and Maine Railroad corridor follows the Merrimack River from Boscawen's southern Concord boundary to its northern Franklin boundary.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more biodiversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Boscawen: ¹⁸

Hirst Wildlife Marsh Area, owned by the NH Fish and Game, is critical habitat for freshwater wetlands species.

The 70 acre Patenaude's Pond, with its rare undeveloped shorefront, is situated within a 1000+ acre parcel in the southwestern part of Town. Abutting the Town Forest, the parcel itself is also undeveloped and supports a wide variety of plant and animal species.

At this time, no heron rookeries have been identified in Town although several local marshes and wetlands may accommodate them.

White cranes and mink have been spotted on the Merrimack River.

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Choate Hill scenic vistas overlooking the Merrimack River and Canterbury
- B scenic vista overlooking Walker Pond and Mount Kearsarge
- B scenic vista from Merrimack County Farm
- B Walker Pond's scenic views of Mount Kearsarge
- B Hirst Marsh area (Boscawen Town Forest/Dagody Hill)

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Boscawen. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Boscawen	Region
First Priority	Plant communities	Scenic vistas
Second Priority	Animal communities	Plant/tree communities (tied w/3rd)
Third Priority	Scenic vistas	Greenway corridors (tied w/2nd)
Fourth Priority	Deeryards (tied)	Riparian corridors
Fifth Priority	Greenway corridors (tied)	Biological diversity

Half of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources, while half disagreed. ³¹

Specific comments 31

B We need more information



regarding the designation of scenic roads.

1 Geologic Resources

Surficial Geology

One of the most significant features is a drumlin in the southern eastern part of Town, directly north of the Unnamed Pond. Various stratified gravel and gravel deposits lie in kame terraces and eskers, with corresponding outwash plains, in the Tannery Brook area. Stratified sand and silt from glacial outwash lie next to the Merrimack River just south of the Northfield town line.

Additional and perhaps more recognizable geologic formations are Boscawen's hills: 14,28

MOUNTAINS AND HILLS	Elevation
Choate Hill	800'
Dagody Hill	620'
Knowlton Hill	760'

Unnamed Hill (NE section of Town) 940'
--

Bedrock Geology

Two-thirds of Boscawen is underlain by the Littleton Formation of Undifferentiated Schists and Gneiss, which is comprised mostly of gray mica. The remaining one third of Town, in the North Western section, is underlain by an unnamed pluton composed of Granodiorite-Biotite Granodiorite-Biotite Quartz Monzonite (mostly quartz, some garnet). A long vein of garnet also winds down through Boscawen. ^{14, 18}

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: $^{18,\,32}$

- 1 variety of gorges and eskers
- 1 glacial erratics between Routes 3 and 4
- 1 garnet veins
- gravel pits at entrance to Town on Route 4 at Concord/Boscawen intersection
- 1 clay along Cold Brook
- 1 cave on Colby Farm
- 1 Indian Rock at Colby Farm
- 1 cliffs along King Street
- 1 soapstone mine on Choate Hill on High Street
- 1 Choate Hill
- 1 Colby Hill

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Boscawen. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Boscawen	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Sand and gravel deposits	Soils identification
Third Priority	Bluffs	Sand and gravel deposits
Fourth Priority	Soils	Bluffs
Fifth Priority	Caves	Gorges

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources. ³¹

Specific comments 31

1 Most of these are resources are on private land and may one day be lost.

X Recreational Resources

A variety of recreational opportunities and resources exist in Boscawen that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Elementary School Playground	public	North Main Street (East)	2 acres
Boscawen Sportsmen's Club	private	Daniel Webster Highway (West)	60 acres
Town Forest Trail System	public	Weir Road	443 acres
Merrimack River Beach/Boat Access	public	north of Merrimack County Jail	3 acres
Merrimack River Beach/Boat Access (3)	public	accessible through Canterbury	
Jamie Welch Park	public	Depot Street	7 acres
Community Church Park	private	High Street before Routes 3 & 4 intersection	5 acres
New Elementary School Playground	public	North Main Street	
Scenic Drive		along Route 4 north to Salisbury	
Hirst / Brockway Marsh	public	Queen Street	

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- **★** Congregational Church community park on High Street, at the junction of Routes 3 and 4
- **★** Jamie Welch Park
- **x** canoe and boat access from the Merrimack County lands
- **X** Merrimack River beaches
- **★** Old Home Day
- **x** railroad bed
- **X** Town Forest trails
- **X** Merrimack County lands
- **★** Merrimack River State



Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Boscawen. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Boscawen	Region
First Priority	Picnic areas and playgrounds	Recreational trails
Second Priority	Outdoor sporting fields	Canoe/boat access



Third Priority	Recreational trails	Outdoor sporting fields
Fourth Priority	Canoe/boat access	Picnic areas and playgrounds
Fifth Priority	Beach access	Beach access

Specific comments 31

★ Only private efforts protect the recreational opportunities available.

***** Other Identified Resource Priorities

Town officials and volunteers have named the following other resources, often intangible, as being particularly important to the Town: ¹⁸

- citizen education on zoning and planning
- * historic district

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Boscawen has established both a Conservation Commission and, more recently, an Historic District Commission.

Conservation Commission

Recent activities of the Conservation Commission include: developing an interpretive nature trail, with marked posts and an illustrated guide; recertification of its Tree Farm; a revision is underway for the Town Forest Management Plan; participation in the Walker Pond Study Committee; oversight on the activities of the construction of the NH Veterans Cemetery; review of wetlands applications; examination of gravel pits and telecommunications issues; and encouraging the redevelopment of the Heritage Trail.

Historic District Commission

The Historic District Commission, created in 1998, has been working diligently on the establishment of an historic district since its inception. The area of historical significance, lands abutting King Street, contains five sites on the National Register of Historic Places. In midsummer, the concept of an Historic District was denied by the Planning Board and the majority of property owners within the proposed District.

Historical Society

A private Historical Society also exists to help protect Boscawen's heritage. Recent activities of the Society included overseeing the building's belfry's careful restoration, accommodating the Town Post Office, and housing a collection of historical items. An inventory of the cemeteries of Boscawen was begun.

Other important, recent preservation accomplishments include the capping of the Corn Hill Road landfill and the clean-up of the old leather scraps at the Town Forest. These projects took a tremendous coordination effort, and funds from the US EPA and the NH DES were acquired to help offset the costs to the Town.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Boscawen's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ✓ volunteering at the Town Park
- ☑ creating trails through the Town Forest
- ✓ maintaining the Town Forest
- ✓ hosting discussions on open space
- proposing an historic district
- ☐ chairing and participating in the Upper Merrimack River Local Advisory Committee (UMRLAC)

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- continuation of activities at Town Forest
- monitoring of development
- compiling a list of open spaces
- chairing and participating in the Upper Merrimack River Local Advisory Committee (UMRLAC)

Essential Factors to Boscawen's "Quality of Life"

- M not becoming overpopulated
- M open spaces and greenways
- M aesthetics for residents and visitors alike
- M rural character
- M lack of "Loudon Road" development
- M limiting commercial development on King Street
- M located close to the Capital City
- M availability of recreational trails

<u>REFERENCES</u>

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Boscawen Zoning Ordinance, 1998
- 7 Town Officials/Employees, 1998
- 8 Boscawen Town Annual Report, 1997
- 9 Boscawen Site Plan Review Regulations, 1998
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Boscawen Master Plan: Land Use Element, 1988
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Boscawen Survey Results, 1998
- 32 Boscawen Conservation Commission
- 33 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

BOW

Ahout Row	
Member of CNHRPC	✓
Surveys Mailed	18
Surveys Received for Tallying	3
REPP Meeting Participation	×
Profile Review & Comment by	✓

Historical Profile

Bow's first permanent settlers arrived in 1728. The exact origin of Bow's name is uncertain, but it is assumed that it was chosen for one of two reasons; either to name it after a small village in England, or to describe the bend that the Merrimack River makes along the Town's eastern border. Bow's boundaries were also "uncertain" for a long time. Overlapping land grants from the New Hampshire and Massachusetts governments caused a series of boundary disputes that were not settled until 1765. During that year, Bow's area was determined to be the territory left over after the division of Pembroke and Concord. Despite these controversies, Bow grew to be an important part of the capital area. The Town was given better access to Concord as early as 1767, and several saw mills operated in the Town throughout the 1800's. Its residential areas saw a development boom during the latter part of the 20th century when the Town became an economic, comfortable, and convenient alternative to living in Concord.

Present-Day Profile

The area of Bow is 19,264 acres, or 30.1 square miles. The Town comprises 3.7% of the CNHRPC area. ²

Over the last twenty-seven years, Bow's population has grown by 158% while the number of housing units has increased by 212%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	<u>Net (</u> #	Change %	
1970 (US Census)	2479	na	na	709	na	na	
1980 (US Census)	4015	+1536	+ 62.0	1247	+538	+ 75.9	
1990 (US Census)	5500	+1485	+ 37.0	1860	+613	+ 49.2	
1997 Population & 1996 Housing (NHOSP)	6406	+906	+ 16.5	2211	+351	+ 18.9	
TOTAL CHANGE FROM 1970 - 1997		+3927	+ 158.4%	_	+ 1502	+ 211.8%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

10 VIII 20 IIII g Districts	10 Wil Truopted Tresource & Conservation Gramanees
Residential	Wetland Ordinance
Rural	Excavation Regulations
Commercial	Aquifer Ordinance
Limited Industrial	Growth Management Ordinance (1998)
General Industrial	
Institutional	
Civic	
Historic District	

Non-regulatory measures for protecting Bow's resources include the following: 7,8,9

Town Master Plan Elements

Town Conservation Plans, Reports and Studies

Goals and Objectives (1992)	Open Space and Recreation Study (1974)
Population and Economics (1992)	Wastewater Collection Study (1978)
Land Use (1992)	Water Resource Study (1982)
Housing (1992)	Aquifer Evaluation/Groundwater Protection Prog (1987)
Transportation (1992)	Water Resource Management and Protection Plan (1989)
Recreation and Open Space (1992)	Inventory and Assessment of Road Surfaces (1994)
Conservation and Preservation (1992)	
Community Facilities (1992)	

TOWN RESOURCES



Water Resources

Water Supplies

Bow depends primarily on ground water for its water supply. In its 1989 Water Resource Management and Protection Plan, the Merrimack and Turkey River aquifers, as well as the Bow Bog, Center, and White Brook aquifers, were recommended for exploration for an eventual municipal water supply.

Between 1983 and 1997, the NHDES has issued 377 well permits to residents of Bow. Many of them are found in the northwest corner of the Town (most of them off of One Stack Drive, Tonga Drive, and Birchdale Road). Other private well clusters are found off of Putney Road (26) and between White Rock Hill Road and Bow Center Road (44), and off of Bow Bog Road by Crockett, Laurel, and Sharon Drives (25). Other private wells are scattered throughout the Town. A few public water supplies are located along the Merrimack River, and a couple are found on Rocky Point Drive. These new well locations have been mapped by NHDES. 10, 14

Ponds 11, 12, 13, 14.

Turee Pond is 52 acres in size and serves as a tributary to Turee Brook.

Rivers 11, 12, 13, 14

The Merrimack River, formed upstream by the confluence of the Pemigewassett and Winnipesaukee Rivers in Franklin, flows along the eastern border of Bow.

Although most of the Turkey River is located in Concord, the last 5100 feet of the river run through Bow.

Bow Bog Brook flows easterly 6.4 miles until it joins the Merrimack River. It has been relocated from its original course in order to accommodate the PSNH coal-fired power plant.

White Brook is located west of Bow Center and flows north to the Bow-Concord boundary. In Concord, it meets the Turkey River.

Bela Brook feeds into Turkey Pond. It begins in Dunbarton and flows easterly through the northwest panhandle of Bow. The land surrounding this brook is subject to periodic flooding.

Turee Brook flows out of Turee Pond and runs for 3000 feet in Bow.

Brickyard Brook begins near Ordway Cemetery in Bow and flows 3200 feet to where it meets the Merrimack River in Hooksett.

Hydric Soils

Out of the total land acreage of Bow (19,266), 12.4% is comprised of hydric soils: 35

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1386	7.2
Very Poorly Drained - organic base	920	4.8
Very Poorly Drained - mineral base	66	0.3
Marsh	22	0.1
TOTALS	2394	12.4

Watersheds

Bow's most important watershed is the Merrimack River watershed. Parts of the Town also drain into smaller watersheds including the Turkey River watershed and the Bow Bog watershed. ^{10, 14}

Aquifers

A 1992 study of Bow's aquifers showed aquifers underlying approximately 1/8 of the Town. The largest one underlies the Merrimack River and is composed of a coarse-grained stratified drift aquifer overlying a fine-grain stratified drift aquifer. Other fine-grain aquifers underlie Bow Bog Brook, Turee Pond, and the wetlands in the Town's northwest panhandle. 14,16

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Areas of prime wetlands in Bow include: the land bordering Brown Hill Road and Dunbarton Center Road, the land in the White Rock Brook and Birchdale Road area, the headwaters of White Brook, and land near Center Brook and Horse Brook. Two of Bow's most important wetland areas are Great Meadow Swamp and Turee Pond.⁶

A number of private consultants have also completed detailed inventories and descriptions of Bow's wetlands.

Identified Water Resource Priorities

Past Town reports have named the following water resources as being particularly important to the Town: ³²

- → Bow Bog Brook
- → Turee Pond
- → The Putney Ponds and Meadows

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bow. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the

general resource priorities of other communities' respondents in the CNHRPC Region: 31

RESOURCE PRIORITIES	Bow	Region
First Priority	Designated prime wetlands	Rivers and streams
Second Priority	Aquifers	Aquifers
Third Priority	Rivers and streams	Lakes and ponds
Fourth Priority	Public water supplies	Designated prime wetlands
Fifth Priority	Floodplains (tied) Other wetlands (tied)	Watersheds

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their water resources.³¹

Specific comments included: 31

- † The ordinances and regulations protecting wetlands are the most efficient.
- + We need more scientifically based ordinances.
- + Larger setbacks are needed, and prime wetlands. In addition, more easements in order to protect it



we need more lands to be designated as land should be made into conservation from municipal development.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 42% of the entire Town. The following table breaks down the components: ^{8, 14, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Albin Road Conservation Lot	Town	146
Allen Road/Bow Bog Road/Hooksett town line parcel	Town	760
Birchdale Road - Town Forest	Town	96
Bow School Grounds	Town	33
Bow Memorial School	Town	49
Bow School Town Forest	Town	105
Bow Bog Brook and watershed	Town	254
Lots adjacent to the Bow Bog watershed	Town	181
Branch Londonderry Turnpike East Conservation Lot	Town	60

TOTAL ACREAGE PROTECTED		8132
Current Use		5450
Walker Forest	Town	92
Turee Pond Easement & Boat Access	NH F& G	1
Turee Pond/White Rock Hill Road Conservation Land	Town	51
St. Paul's School Land	private	
Sargent Park	Town	2
Robinson Road Conservation Land	Town	22
Poor Richard's Drive/I-93 Conservation Lot	Town	40
Pages Corner State Forest	NH DRED	85
Page Road Conservation Land, by Birchdale Road	Town	53
Old School House Park	Town	1
Old Johnson Road Conservation Land	Town	10
Mary Baker Eddy Site	First Church of Christ Scientists	1
Knox Road/Robinson Road Conservation Land	Town	318
Hanson Park	Town	20
Clinton Street Conservation Land	Town	76
Community Center and Pond	Town	3
Cilley State Forest	NH DRED	33
Branch Londonderry Turnpike West Conservation Lot	Town	190

In 1998, Bow supported a 100% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. 23

Identified Land & Forestry Resource Priorities

Past Town reports have named the following land and forestry resources as being particularly important to the Town: ¹⁴

- 2 Oak trees in a 146-acre lot located on the south side of Albin Road
- 2 76-acre lot along Clinton Street that helps Bow maintain green space in the Town's northwest panhandle
- 2 Cilley Tract
- Walker Forest

- 2 Pages Corner State Forest
- 2 all protected conservation lands

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bow. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bow	Region
First Priority	Open space (tied)	Open space
Second Priority	Deeded conservation lands (tied)	Agricultural land
Third Priority	Town parks and forests	Conservation easements
Fourth Priority	Agricultural land	Town parks and forests
Fifth Priority	Conservation easements	Deeded conservation lands

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their land and forestry resources. ³¹

Specific comments 31





efficiently protected.

2 Active financial incentives are

needed.

We need conservation easements on open space. Recreation trails should be protected from development without taking significant rights from landowners.



Historical and Cultural Resources

National Register of Historic Places

Bow currently has no historic locations listed on the National Register. A large effort is required on the part of individuals to promote a place of historic importance through the application process of the National Historic Register. ^{1, 24}

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

The citizens of small New England towns often remember the "comings-and-goings" of

important visitors. A marker celebrating the visit of Andrew Jackson is located on the boundary between Bow and Concord. Just north of this spot, on June 28, 1833, a party of excited citizens met President Jackson. They escorted him to the state's capital, where he celebrated the conclusion of a grand New England Tour. The commemorative marker can now be seen at the intersection of Route 3-A and Interstate 89. The site is sometimes referred to as Andrew Jackson Park. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: ^{1, 8, 18}

- One of Bow's most famous residents was Mary Baker Eddy, the founder of the Christian Science Faith. She spent the first 15 years of her life in Bow, and her birthplace is marked as a historic site.
- Bow Baptist Church was one of the first churches built in Bow. It is located on Branch Londonderry Turnpike East.
- Bow Center Town Hall is also located on Bow Center Road. It was used as the Town Hall for over one hundred years from 1847 to 1957.
- The Nichols Saw Mill once stood at a site near the Bow-Dunbarton town line. This frame building had vertical siding and was once listed with the Historic American Buildings Survey. Unfortunately, it was destroyed in the hurricane of 1938.
- Canals played an important part in the development of Central New Hampshire, and were vital to the transportation of goods before the railroad arrived. The "Bow Canal System" was built in 1808. The Canal Lock, visible from Garvin Falls Road, is only a remnant of the mile long canal system that operated in Bow until the 1840's.
- The Bow Bog Meeting House is an authentically restored Methodist church. This frame church was built in 1832, and its bell was donated later in the nineteenth century by Mary Baker Eddy. During the summer of 1997, its steeple underwent major renovations.
- Sargent John Ordway participated in the Lewis & Clark expedition. The detailed journal that he kept is stored at the New Hampshire Historical Society. His home was located along the Bow-Dunbarton border.
- The first Bow Meeting House was built in 1770 at the top of White Rock. In 1801 a new building was constructed on the same site. This building was used for Town meetings until Bow Center Town Hall was built in 1847.
- The remains of the fieldstone enclosure used to build the Town pound in 1821 can be seen from Branch Turnpike, 400-500 feet from the Bow Baptist Church. Two other Town pounds have also been constructed in Bow over the years.
- The foundation of a Grist Mill (constructed in the early 1800's) is located on South Street. There are indications that other mills were built on this site earlier than 1749.

- Henry Baker served as a US Congressman between 1892 and 1896. He lived in a white frame building on South Street, next to where the Bow Public Library now stands.
- "Steven's House" at Bow Center served as the Town's central meeting place for many years. Built in the early 1800's, it served as a village store and as a post office.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the nineteenth century. Today, they are recognized for their beauty and uniqueness. Although Bow no longer has standing covered bridges, one once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
RR Turkey Falls	unknown	1916

Cemeteries

As do many other small Central Region towns, Bow has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: 8, 18

CEMETERIES	Owner	Parcel Number / Location
Heath Cemetery	private	off Clinton Street
Green Cemetery		Londonderry Branch Turnpike East
Evans (North) Cemetery		on White Rock Hill Road, by Turee Pond
Miss Alice Brown Cemetery (1 grave)	private	on Brown Hill Road
Brown Hill Cemetery (6 graves)	private	Hampshire Hills
Hammond Cemetery	private	off of Dunbarton Center Road
Goodhue Cemetery	private	on Dunbarton Center Road
Hadley Cemetery	private	off of Wood Hill Road
Nichols or East Dunbarton Cemetery		off of Dunbarton Center Road, at the Bow and Dunbarton political boundary
Quimby Cemetery	private	Quimby Road
Ordway Cemetery	private	off Ordway Lane
Alexander Cemetery		on River Road

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- Mary Baker Eddy Site
- Andrew Jackson Park
- Sites of Saw, Grist, Pulp, and shingle Mills
- The Bow Bog School Site
- Bow Mills School
- Reservoir Dam on Bow Bog Road
- Sites of the first and second Town Pounds, built in 1768 and 1799
- Site of the Town Pound on the West Branch Londonderry Turnpike (built 1821)
- Paint Mine
- Old cellar holes
- The Bow Bog Meeting House
- The Old Town Hall at Bow Center
- Museum at the Bow Center School
- Site of the Covered Bridge on Hall Street
- The sites of many one-room school houses
- Ferry crossings
- Sites of Tanyards, Blacksmith's shops, and Shoe Shops

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bow. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bow	Region	
First Priority	Archeological sites	Cemeteries	
Second Priority	Unique stone walls (tied)	Cultural interest sites	
Third Priority	National Register of Historic Places (tied)	Covered bridges	
Fourth Priority	Mill sites (tied)	National Register of Historic Places	
Fifth Priority	Covered bridges	Archaeological sites	

The majority of respondents felt that the adequately protect their historical and



Town's ordinances and regulations do not cultural resources. ³¹

Specific comments 31

Sites need to be identified, prioritized, and addressed in regulations

B Ecological Resources

NH Natural Heritage Inventory

Two outstanding animal species have been located in Bow since the 1930's and were recorded in the NHI database. ²⁷

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been sighted in Bow only once within the last 20 years.

The Wood Turtle (Clemmys insculpta) has only been seen at four NH locations in the last twenty years, one of them in Bow.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Bow: 15, 18 19

A large riparian corridor is located along the Merrimack River which forms the entire eastern boundary of the Town. The presence of water coupled with a cleared pathway form the basis for a significant animal travel corridor.

The Boston and Maine Railroad corridor follows the Merrimack River from Bow's southern Hooksett boundary to its northern Concord boundary. This old right-of-way provides recreational opportunity for humans and a quiet but direct travel route for animals.

Other corridors bring utilities to Bow's households and businesses. Some of Bow's major utility corridors follow the Merrimack River and then cut south-west towards Dunbarton approximately one mile from the Bow-Hooksett border.

Bow offers a wide range of walking, hiking, and biking trails which can also serve as wildlife corridors.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Bow: ^{14, 18}

Turee Pond and its surrounding bog provide a valuable ecosystem for many freshwater wetlands species including waterfowl. White pine are found in the area.

The Bow Bog watershed is a critical habitat for many animal and plant species including: white tail deer, beaver, grouse, and other small game.

At this time, no heron rookeries have been identified in Bow although several local marshes and wetlands may accommodate them.

Scenic Roads and Vistas 14,32

Picked Hill is a rugged area with steep slopes and rocky soils. Scenic views of the White Mountains and the Concord area can be seen from its ridge line and above.

The Greylore Pond area is a scenic open space that combines views of water and undeveloped land

Woodhill Hooksett Road passes through a variety of terrains, and provides a variety of pleasing scenery. When at high levels, scenic views of the valley and of mountains can be seen. When at low levels, the road passes alongside the Hornbeam Swamp area.

Allen Road, an unofficial scenic road, passes through a wet, heavily forested area.

Brown Hill provides scenic hilltop views.

The Wood Hill area provides scenic views of the White Mountains.

Putney Pond and the marshy and forested lands that surround it provide important wildlife habitats and scenic views.

Bow also has a number of designated scenic roads throughout the Town.

Identified Ecological Resource Priorities

Past Town records have named the following ecological resources as being particularly important to the Town: 14,18,28

- B Bow School Wildlife Refuge
- B Conservation Commission Land
- B Hammond Meadows (a wetland area surrounded by steep slopes)

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bow. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bow	Region	
First Priority	Greenway corridors	Scenic vistas	
Second Priority	Deeryards	Plant/tree communities (tied w/3rd)	
Third Priority	Animal communities (tied)	Greenway corridors (tied w/2nd)	
Fourth Priority	Riparian corridors (tied)	Riparian corridors	
Fifth Priority	Biological diversity	Biological diversity	

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources.³¹

Specific comments 31

- B We need to identify, manage, and preserve our ecological resources.
- B We need regulations that sub-regulations do not protect vistas from housing developments.

consider animal habitats. Bow's current animal habitats (deeryards, moose) or scenic

1 Geologic Resources

Surficial Geology

Stratified sand and silt from glacial outwash and recent stream deposits lies in the land adjacent to the Merrimack River. This land is a remnant of the last glacial period, known in North America as the Wisconsin Glacial Period. A few stratified gravel and sandy gravel deposits are found throughout the Town in kame terraces, valley trains, eskers, and outwash plains.¹⁴

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Brown Hill	900'
Great Hill	920'
Line Hill	840'
Picked Hill	910'
Wood Hill	900'

Bedrock Geology

Approximately 80% of Bow is underlain by the Littleton Formation of Undifferentiated Schists

and Gneisses. Binary granite, sometimes called Concord Granite, underlies a small northern section of Town. 12, 14, 18

Identified Geological Resource Priorities

Past Town reports have named the following geologic resources as being particularly important to the Town: 18

- 1 Brown Hill
- 1 White Sands
- 1 Gravel pits

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bow. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community's respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bow	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Sand and gravel deposits	Soils identification
Third Priority	Soils identification (tied)	Sand and gravel deposits
Fourth Priority	Eskers, kames, and drumlins (tied)	Bluffs
Fifth Priority	Gorges	Gorges

The majority of the respondents felt adequately protect their ecological



that the Town's ordinances and regulations resources.³¹

Specific comments 31

1 No response

X Recreational Resources

A variety of recreational opportunities and resources exist in Bow that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: $^{18, 29, 32}$

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Birchdale Road Town Forest	public	west of Turee Pond, near the Concord town line	96 acres
Boat Ramp and Picnic Area at the Public Service Plant	public	on the Merrimack, at the south end of River Road	
Bow Bog Brook	public	between Interstate 93 and Bow Bog Road	130 acres
Bow Bog Meeting House	public	at the intersection of Bow Bog Road and Stoney Brook Road	1 acre
Bow Community Center and Pond	public	at the Intersection of Knox Road and Logging Hill Road	3 acres
Bow High School	public	32 White Rock Hill Road	
Bow Memorial & Elementary School	public	Bow Center Road	49 acres
Bow School Forest Land (hiking, snowmobiling, nature walks)	public	off Bow Center Road	105 acres
Bow Pioneer Snowmobile Club and Trails	public & private		
Cilley State Forest	public	off Interstate 89, by the Concord town line	33 acres
Conservation Commission lands	public	easements located along Interstate 93, adjacent to the Bow School Forest, south of Route 13, near Turee Pond, and along the Branch Londonderry Turnpike	1080 acres
Hanson Recreational Park	public	borders Albin Road and Turee Pond	150 acres
Mary Baker Eddy Site	private	off Route 93	1 acre
Old School House Park	public	Bow Center	1 acre
Old Town Hall	public	Bow Center	1 acre
Pages Corner State Park	public	in the north panhandle	83 acres
Sargent's Field	private	behind the Municipal Building, on Grandview Road	2 acres
Turee Pond Boat Ramp	public	off of White Rock Road	1 acre
Walker Forest	public	on the Branch Londonderry Turnpike	92 acres

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- × Putney's Pond
- **X** River Road Boat Access
- X Turee Pond Boat Access
- **★** Museum at Bow Center School
- **★** Bow School Forest

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bow. Although the results are not statistically significant, they do give an important indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region:

RESOURCE PRIORITIES	Bow	Region
First Priority	Recreational Trails	Recreational Trails
Second Priority	Outdoor sporting fields	Canoe/boat access
Third Priority	Canoe/boat access	Outdoor sporting fields
Fourth Priority	Picnic areas and playgrounds	Picnic areas and playgrounds
Fifth Priority	No response	Beach access

Specific comments 31

X No response



Other Identified Resource Priorities

Town officials not name any particular importance to the Town. 18

and volunteers did other resources of

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Bow has established both a Conservation Commission and a Historical Commission.

Conservation Commission

In 1997, the Bow Conservation Commission created a private, non-profit land trust to be overseen by Bow residents and taxpayers. The trust will let the Conservation Commission continue to manage land for forestry and recreational purposes, while letting the Town dictate the land's municipal and educational uses. The trust is expected to give Bow more control over future land easements. In 1998, the Town acquired 760 acres of land, Bow's largest tract of undeveloped space, defined roughly by Allen Road, Bow Bog Road, and the Hooksett town line. 33, 34

Historical Commission

The Bow Historical Commission oversees the research and protection of the Town's historical resources. The commission recently supervised the renovation of the Bow Center Schoolhouse. It was open to the public two times in 1997 and was visited by close to 200 people. In addition, The Historical Commission has been recording Bow's heritage in their third Town picture book.⁸

Bow Open Spaces

This non-profit group was established to oversee the current and future land acquisitions of the Town. Their focus includes creation of recreational trail and open space networks.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Bow's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ✓ acquired conservation lands/easements
- ✓ formed the "Bow Open Spaces" group
- ☑ allocated 100% of Use Change Tax to Conservation Funds

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- continuing to encourage the protection of open space
- laying new recreational trails

Essential Factors to Bow's "Quality of Life"

- M open space
- M low crime rate
- M community volunteers
- M community spirit
- M good schools
- M fair taxation
- M the economy
- M river protection
- M cluster developments
- M setbacks

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Bow Zoning Ordinance, 1996
- 7 Town Officials/Employees, 1998
- 8 Bow Town Annual Report, 1997
- 9 Bow Site Plan Review Regulations, 1998
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Bow Master Plan: Conservation and Preservation Element, 1992
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1997
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 (reserved)
- 31 Bow Survey Results, 1998
- 32 Bow Open Space & Recreation Study, 1974
- 33 NHACC Newsletter, "Bow CC Creates Land Trust"
- 34 Concord Monitor, January 28, 1998, "Town Eyes Big Conservation Catch"
- 35 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

BRADFORD

Ahout Bradford	
Member of CNHRPC	✓
Surveys Mailed	17
Surveys Received for Tallying	2
REPP Meeting Participation	×
Profile Review & Comment by	*

Historical Profile

Bradford was incorporated in 1787 by the New Hampshire Legislature. The first Town Meeting was held that same year with the population of the Town numbering 130. The first meeting house was built in 1798 and the Town began constructing other town buildings and roads soon after. In the early 1800's the great General Lafayette of the Revolution visited Bradford. His visiting the Town was one of the Town's proudest moments. The major industry in the Town has always been agriculture. An early account explains that no matter what anyone in the Town did for work, everyone spent some time in the garden. Bradford maintains much of its rural character today with a few working farms and many uninhabited acres.

Present-Day Profile

The area of Bradford is 22,784 acres, or 35.6 square miles. The Town comprises 4.4% of the CNHRPC area. ²

Over the last twenty-seven years, Bradford's population has grown by 109% while the number of housing units has increased by 49%: ^{3,4,5}

GROWTH	Population	<u>Net</u> #	Change %	Housing Units	<u>Ne</u> #	t Change %	
1970 (US Census)	679	na	na	523	na	na	
1980 (US Census)	1115	+ 436	+ 64.2	696	+ 173	+ 33.1	
1990 (US Census)	1405	+ 290	+ 26.0	753	+ 57	+ 8.2	
1997 Population & 1996 Housing (NHOSP)	1420	+ 15	+ 1.1	781	+ 28	+3.7	
TOTAL CHANGE FROM 1970 - 1997		+ 741	+ 109.1%		+ 258	+ 49.3%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts Town-Adopted Resource & Conservation Ordinances

Town Zoning Districts	Town-7 dopted Resource & Conservation Ordinances
Residential/Business District	Floodplain Development Ordinance (1988)
Conservation District	Cluster Development Ordinance
Rural Residential District	Historic District Regulations
Village District (proposed in 1996 Master Plan)	Wetland Development Ordinance (1989)
Prime Commercial District (proposed in 1996 Master Plan)	Excavation Regulations
Lake Front District (proposed in 1996 Master Plan)	Sewage Sludge Regulations (1996)
Residential Rural District (proposed in 1996 Master Plan)	
Controlled Community Development District (proposed in 1996 Master Plan)	
Historic District (proposed in 1996 Master Plan)	

Non-regulatory measures for protecting Bradford's resources include the following: $^{7,\,8,\,9}$

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Objectives (1996)	Governor's Cornerstone Project participant (1992)
Land Use (1996)	Community Profiles participant
Housing, Population and Demographics (1996)	
Transportation (1996)	
Utilities and Public Services (1996)	
Community Facilities and Resources (1996)	
Recreation (1996)	
Conservation and Preservation (1996)	
Construction Materials (1996)	

TOWN RESOURCES



Water Resources

Water Supplies

Ten public water supplies exist within the Town. Most are situated along Main Street at the Bradford Town Hall and Central School, plus found at the Appleseed and Bradford Inns.

Between 1983 and 1997, the NHDES has issued 44 well permits to residents of Bradford. These new well locations have been mapped by NHDES. ^{10, 14}

Lakes and Ponds 11, 12, 13, 14

Lake Todd shares its shores with both Newbury and Bradford. This 168-acre lake has a maximum sounded depth of 22 feet and has an established protective association.

Lake Massasecum is the largest water body in the immediate area. This 403-acre lake has a maximum sounded depth of 50 feet and serves as a major tributary to the Warner River. It is served by the Lake Massasecum Improvement Association, which monitors the water quality and the presence of a non-native invasive plant species, milfoil. This lake is in particular danger of overflowing during the rainy season since it is topologically at the same level as the nearby floodplains.

Ayers Pond lies on the Washington - Bradford border. This is a small 28-acre pond with an average depth of 9 feet.

The Warner River is the only river located within the boundaries of Bradford. This river begins in the area north west of Lake Massasecum with the confluence of a few small streams. North of Lake Massasecum the river visually materializes as water from the lake is added to it. The Warner River then flows east and into Warner.

Brooks 11, 12, 13, 14

Hoyt Brook travels from near the Washington town line several miles easterly to the Warner River.

West Branch begins from the side of Mount Sunapee and joins the Warner River near the junctions of Routes 103 and 114.

Melvin Brook, also known as Pond Brook, connects Lake Massasecum with the Warner River.

Bog and Beard's Brooks are hydrologically associated with the Bradford Bog. They flow south into Hillsborough.

Several unnamed brooks flow into Hoyt Brook and West Branch.

Hydric Soils

Out of the total land acreage of Bradford (22,784), 10.2% is comprised of hydric soils: ³²

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1279	5.6
Very Poorly Drained - organic base	648	2.8
Very Poorly Drained - mineral base	231	1
Marsh	170	.7
TOTALS	2328	10.2

Watersheds

Bradford lies in the Contoocook River sub-basin. Its principal watershed is that of the Warner River. A small portion of the Town's south west corner also lies in the Beards Brook watershed.^{10, 12}

Aquifers

A fairly large stratified drift aquifer exists along the Warner River in the north western corner of Bradford. This aquifer continues under Lake Massasecum and into Warner. ¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot much of the Town. Large areas of mapped wetlands which do not co-occur with ponds are found along the Warner River, off Moon Corner Road, off Alder Plains Road, off Purrington Road, and County Road. ¹⁷

Identified Water Resource Priorities

The Bradford Master Plan named the following water resources as being particularly important to the Town: ¹⁸

- the various aquifers underlying the Town is the prime source of potable water
- + preservation or management of the remaining undeveloped lake areas
- retain the floodplain area between Bradford Pines, Melvin Mills, and Lake Massasecum for its invaluable use as a floodplain

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bradford. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bradford	Region
First Priority	Aquifers	Rivers and streams
Second Priority	Lakes and ponds (tied w/3rd)	Aquifers
Third Priority	Other wetlands (tied w/2nd)	Lakes and ponds
Fourth Priority	Public water supplies	Designated prime wetlands
Fifth Priority	Rivers and streams	Watersheds

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

- → More protection is needed for
- ★ Stiffer enforcement of protective



these resources regulations

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 72% of the entire Town. The following table breaks down the components: 8, 20, 21, 22

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Aiken Town Forest	Town	120
Bradford Bog Park	Town	66
Bradford Pines Natural Area	NH DRED	5
Bradford Springs	Town	20
Brown Shattuck Park	Town	3
Central School	Town	13
L Dodge Lot	Town	7
French's Park	Town	3
Low State Forest (portion within Bradford)	NH DRED	717
Pearl Town Forest	Town	37
Whitman Park	Town	4
Current Use		15,326

TOTAL ACREAGE PROTECTED		16,321
-------------------------	--	--------

In 1998, Bradford supported a 50% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

The 1996 Master Plan named the following land and forestry resources as being particularly important to the Town: ¹⁴

- 2 80-90% of the Town's land area is forested
- 2 agricultural land

Survey Findings

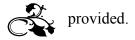
The following table documents the general resource priorities of those who returned surveys from the Town of Bradford. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bradford	Region
First Priority	Conservation easements	Open space
Second Priority	Open space	Agricultural land
Third Priority	Deeded conservation lands	Conservation easements
Fourth Priority	Town parks and forests	Town parks and forests
Fifth Priority	none selected	Deeded conservation lands

All of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources. ³¹

Specific comments 31

2 no additional comments were





Historical and Cultural Resources

National Register of Historic Places

Bradford has two exemplary sites located on the National Register, both of which were nominated and listed in the late 1970's and early 1980's. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Bement Covered Bridge	11/76	1/4 mile north of junctions of NH Routes 103 and 114	One of the few remaining covered bridges located in New Hampshire. Built in the long truss style by Colonel Stephen Long in 1854.
Bradford Town Hall	11/80	On West Main Street	

Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

One of the most well-known historical sites in Bradford is the Bradford Center. The Bradford Center is a common which was designated the geographical center of Town in 1791. At one time many town buildings and other structures stood at this location. Today the Town pound, the District One School House (built in 1793) and the Congregational Society Meeting House (dedicated in 1838) cam still be found standing at this location. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 14

- The Bradford Primeval Pines are of ecological as well as historical importance to the Town and the Region. Owned by the State, this 5 acre plot contains several very large and ancient pine trees.
- The Bradford Springs is the site of an old hotel and spa associated with a sulfur spring. This wetland is encompassed within the Bradford Bog.
- A site known as the "Indian Tie-up" has been traditionally described as a Native American campground. Technically located in Henniker, it lies just beyond the current political boundary shared with Bradford.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Bradford is one of the few towns in New Hampshire which has an existing covered bridge. Several more once existed in Bradford and have since been lost: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Henniker Road	1842	1949
RR # 144 Cheney	1887	1922
RR # 147 Wheeler	1887	1929
Bement	1854	still in existence

Cemeteries

As do many other small Central Region towns, Bradford has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Ames Cemetery (1834-1894)	private	
Bagley/Hadley Cemetery (1841-1909)	private	
Burial Hill (1797-1870)		
Center Burial Yard (1801-1882)		
Colby Cemetery (1848-1904)	private	
Cummings/Pierce Cemetery (1805-1893)	private	
Durrell Cemetery (1836-1877)	private	
Eaton Cemetery (1833-1914)	private	
Howlett Cemetery (1846-1899)	private	
Marshall/Collins Cemetery (1821-1911)	private	
New Pond Cemetery (1854-)		
Old Pond (1816-1854)		
Pleasant Hill Cemetery (1880-)		
Presbury Cemetery (1823-1977)		
Sunny Plain Cemetery (1922-)	town	
Union Cemetery (1848-)	town	

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

cemeteries

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bradford. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bradford	Region
First Priority	Covered bridges	Cemeteries
Second Priority	National Register Historic Places	Cultural interest sites
Third Priority	Cultural interest sites (tied)	Covered bridges
Fourth Priority	Unique cellar holes (tied)	National Register of Historic Places
Fifth Priority	Cemeteries	Archaeological sites

Half of the respondents felt that the Town's ordinances and regulations adequately protect their historical and cultural resources, while half disagreed. ³¹

Specific comments 31

Stricter enforcement of



regulations is needed near historic sites.

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant species have been located in Bradford since the 1930's as well as two outstanding natural communities and recorded NHI program's database. ²⁷

The Atlantic White Cedar (*Chamaecyparis thyoides*) is a rare tree found in only a few communities in New Hampshire. The tree is not listed in the state as threatened since there are 32 listed locations, but the unique tree once was located in Bradford.

Green Adder's-Mouth (*Malaxis unifolia*) is listed as threatened in the State of New Hampshire, but not federally. There are now 11 locations in New Hampshire and only a historical location in Bradford

Sclerolepis (*Sclerolepis uniflora*) is listed as endangered in the State of New Hampshire, but not federally. Only one state-wide location of this rare plant is known, and it was found in Bradford.

An Atlantic White Cedar Basin Swamp exists in Bradford and in only 26 other locations around the State. This rare community creates a unique habitat for species of plants and animals that cannot survive well elsewhere.

The Inland New England Acidic Pond Shore/Lake Shore Community is found at two locations in Bradford. This community is found in only ten other locations around the State.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Bradford: 15, 18 19

A large riparian corridor is located along the Warner River which flows through the north eastern part of Bradford. Other corridors can be located between large wetlands, tree stands, and open fields.

Scenic Vistas

The Bradford Master Plan identified many locations as scenic. They include Alder Plains Marsh, from either County or Alder Plains Road, which provides breathtaking views of Mount Sunapee above a red maple swamp. Open fields, particularly those at Messer's Farm, battle's Farm and from the Lettvin Home on Rote Mountain also provide great views. Other wetlands, including Blood Meadow, a pasture and wet meadow for over a century, provide views of Mount Kearsarge. 14

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more biodiversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Bradford: ^{14, 18}

Low State Forest is a large 717-acre parcel of undisturbed and protected land in the southern part of Bradford. This State Forest crosses the border of Bradford and continues into Hillsborough.

A heron rookery of five to six nests is located on Brown's Marsh.

The communities listed above from the Natural Heritage Inventory register are exemplary in their ability to provide habitat for a variety of sensitive plants and animals.

Identified Ecological Resource Priorities

The Bradford Master Plan has named the following ecological resources as being particularly important to the Town: ¹⁴

- B Bradford Bog area
- B Aiken Pasture

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bradford. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bradford	Region
First Priority	Scenic vistas	Scenic vistas
Second Priority	Greenway corridors	Plant/tree communities (tied w/3rd)
Third Priority	Natural Heritage Inventory	Greenway corridors (tied w/2nd)
Fourth Priority	Bio-diversity	Riparian corridors
Fifth Priority	Riparian corridors	Biological diversity

The half of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources, while half disagreed. ³¹

Specific comments 31

B no additional comments were

provided



1 Geologic Resources

Surficial Geology

Kames and kame terraces lie beside the Warner River which runs through the north eastern region of the Town and along Lake Massasecum in east Bradford. Isolated organic deposits lie in scattered wetlands. ¹⁴

Additional and perhaps more recognizable geologic formations are mountains and hills: 14, 28

MOUNTAINS AND HILLS	Elevation
Rowes Hill	1920'
Knight's Hill	1940'
Silver Hill	1760'
Pickett Hill	1560'
Goodwin Hill	1320'

Guild Hill	1140'
Cedar Hill	1060'
Hogg Hill	1140'
Haystack Mountain	1700'
Avery Ledge	1921'

Bedrock Geology

Bradford's bedrock is composed almost entirely of a pluton comprised of Kinsman Quartz Monzonite. The only section of Town that differs in composition is a patch of Binary or "Concord" Granite which underlies the Lake Massasecum area. 14, 18

Identified Geological Resource Priorities

The Bradford Master Plan named the following geologic resources as being particularly important to the Town: ¹⁴

- Devil's Cave, a small cave in Lowe State Forest, is located on ledges near the ridge on Rowe Mountain
- 1 Avery Ledge
- 1 "Tippin' Rock" is a large glacial boulder balanced on ledge and is located near the East Washington political boundary

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Bradford. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bradford	Region	
First Priority	Mountains and hills	Mountains and hills	
Second Priority	Eskers (tied)	Soils identification	
Third Priority	Sand and gravel deposits (tied)	Sand and gravel deposits	
Fourth Priority	Soils identification	Bluffs	
Fifth Priority	Caves	Gorges	

Half of the respondents felt that the Town's ordinances and regulations adequately protect their geologic resources, while half disagreed. ³¹

Specific comments 31

1 Most of these are resources are on private land and may one day be lost.



X

Recreational Resources

A variety of recreational opportunities and resources exist in Bradford that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{14, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Aiken Town Forest	public	Southwest Bradford off Purrington Road	120 acres
Bradford Bog	public	Southwest corner off East Washington Road.	60 acres
Bradford Springs (part of Bradford Bog)	public	East Washington Road, near the Washington town line	
Pearl Town Forest (with 2 short trails)	public	Central Bradford of West Road	35 acres
Bradford Pines walking trail	public	along Route 103 south of Main Street	1 mile
Fitness Trail	public	Northwest Bradford off Old Sutton Road	6 miles
Brown Shattuck Park	public	Off Route 114 in North east Bradford	4 acres
Bradford Center Restoration	public/p rivate	/p On Rowe Mountain Road	
Central School	public	Off Route 103 in Northeast Bradford	13 acres
Bradford Pines State Forest	public	Between Water Street and Route 114	5 acres
Athletic Fields	public	on Old Warner Road at Kearsarge Regional Elementary School	
Low State Forest	public	South central Bradford/North Hillsborough	1098 acres
French's Park picnic area	public	Near Lake Massasecum off Route 114	3 acres
Town Boat Ramp	public	Lake Massasecum, located off Route 114	1 acre

Identified Recreational Resource Priorities

The Bradford Master Plan named the following recreational resources as being particularly important to the Town: ¹⁴

X Old Town Roads are often used for recreation

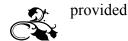
Survey Findings

The following table documents the geneal resource priorities of those who returned surveys from the Town of Bradford. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Bradford	Region
First Priority	Kiosks, shelters and boardwalks	Recreational trails
Second Priority	Recreational trails Canoe/boat access	
Third Priority	Picnic areas	Outdoor sporting fields
Fourth Priority	none selected	Picnic areas and playgrounds
Fifth Priority	none selected	Beach access

Specific comments 31

x no specific comments were



Other Identified Resource Priorities

Town officials and volunteers have named the following other, often intangible, resources as being particularly important to the Town: ¹⁸

Class VI roads for recreational purposes

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Bradford has established both a Conservation Commission and a Historic Society.

Conservation Commission

Recent activities of the Conservation Commission include: maintaining public use of Class VI roads, finding parcels of land which may help connect conservation areas, improvements to the fitness trail, /3rd annual Bradford Earth Day Clean-up Extravaganza, mapping of public trails, and working on the Bradford Bog Boardwalk.

<u>Historical Society</u>

A Historical Society also exists to help protect Bradford's heritage. Recent programs of the Society include: a concert by the Kearsarge Regional High School Music Department, author Jean Bennett, a dramatization of George Washington, a Band Concert and Berry Festival, the Irish immigration in NH by Ruth Ann Harris, the dedication of a plaque at the site of the Bradford Springs Hotel, and the annual reunion of the Alumnae of the Center School.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Bradford's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ developed a trail system and published a map
- ✓ wetland evaluations
- ☑ a natural resources inventory
- ☑ boardwalk in bog
- ☑ land acquisition

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- preserve what we have
- land acquisitions

Essential Factors to Bradford's "Quality of Life"

- M "neighbor knowing neighbor"
- M "neighbor helping neighbor" (volunteerism!)
- M enforcement of current regulations

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Bradford Zoning Ordinance, 1994
- 7 Town Officials/Employees, 1998
- 8 Bradford Town Annual Report, 1997
- 9 Bradford Site Plan Review Regulations, 1986
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Bradford Master Plan, 1996
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Bradford Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

CANTERBURY

Ahout Canterhury	
Member of CNHRPC	✓
Surveys Mailed	16
Surveys Received for Tallying	3
REPP Meeting Participation	✓
Profile Review & Comment by	✓

Historical Profile

In 1727, King George II of England granted two hundred 80-acre lots in the region encompassing what we now recognize as Canterbury, Northfield, and Loudon. By 1790, Canterbury had been incorporated as a separate town. The arrival of the Shakers in 1792, a self-sufficient religious sect brought from England to America by its founder Ann Lee, distinguishes Canterbury's establishment. The Shakers' presence coupled with the success of other Canterbury farmers helped make the Town an agricultural center. Unfortunately, talk of better, fertile lands in the Midwest lured many away from New Hampshire, and new benefits borne by a modernizing America led to the Shakers' decline. Even so, Canterbury's handsome heritage lives on through the preservation efforts of its residents. The 1952 establishment of a Planning Board made Canterbury a forerunner in the regulation of New Hampshire's land use. These efforts have paid off, and Canterbury remains one of the most historically and ecologically rich communities in Central New Hampshire. 1, 14

Present-Day Profile

The area of Canterbury is 28,672 acres, or 44.8 square miles. The Town comprises 5.6% of the CNHRPC area. ²

Over the last twenty-seven years, Canterbury's population has grown by 101% while the number of housing units has increased by 142%: ^{3, 4, 5}

GROWTH	Population	<u>Net</u> #	t Change %	Housing Units	<u>Net C</u> #	<u>Shange</u> %	
1970 (US Census)	895	na	na	326	na	na	
1980 (US Census)	1410	+ 515	+ 57.5	583	+ 257	+ 78.8	
1990 (US Census)	1687	+ 277	+ 19.6	724	+ 14	+ 2.4	
1997 Population & 1996 Housing (NHOSP)	1800	+ 113	+ 6.7	788	+ 64	+ 8.8	
TOTAL CHANGE FROM 1970 - 1997		+ 905	+ 101.1%		+ 462	+ 141.7%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town of Canterbury has adopted a number of land use controls to facilitate the conservation process: ^{6, 14}

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Agriculture/Conservation	Historic District Ordinance
Rural	Wetland Ordinance
Residential	Floodplain Ordinance
Central Historic District	Shoreland Ordinance
Shaker Historic Overlay District	Aquifer Ordinance
Shaker Village Museum Preservation District	Excavation Regulations
Resource Reserve Natural	
Industrial	
Commercial	

Non-regulatory measures for protecting Canterbury's resources include the following: ^{7, 8, 9}

Town Master Plan Elements

Town Conservation Plans, Reports and Studies

Land Use Element (1998)	
Natural, Historic, and Scenic Resources Element (1998)	
Transportation Element (1998)	
Community Services & Facilities Element (1998)	
Housing Element (1998)	
Economic Development Element (1998)	
Regional Planning Element (1998)	

TOWN RESOURCES

Water Resources

♦ Water Resources

Forrest Pond and Forrest Pond Brook, the Big Meadow, human-made Shaker ponds and streams, and the Merrimack River are a few of the many waterways that comprise Canterbury's surface water resources. Canterbury's households depend on ground water tapped from private wells. ¹⁴

Between 1983 and 1997, the NHDES has issued 107 well permits to residents of Canterbury. The majority of them are located along Route 132 (11), Baptist Road (11), Baptist Hill Road (8) Hackleboro Road (6), and Shaker Road (9). Other private well clusters are located around New Pond and in the region defined roughly by the convergence of Cogswell, Southwest, and Center Roads. Other private wells are scattered throughout the Town. These new well locations have been mapped by NHDES. ^{10, 14}

Ponds 11, 12, 13, 14

Forrest Pond, located close to the Northfield border, has a size of approximately 23 acres. The average depth of the pond is 13 feet. It serves as a tributary to Forrest Pond Brook.

Crane Neck Pond is approximately 11 acres in size, with an average depth of five feet.

Kimball Pond is just over 10 acres in size and has an average depth of eight feet.

New Pond, sometimes called Stump Pond, is 30 acres in size. It has a shoreline of 1.3 miles and an average depth of eight feet. It serves as a tributary to Shaker Brook.

Lyford Pond is located next to New Pond. It is 26 acres in size and also has an average depth of eight feet.

Horseshoe Pond is located in the south central part of Canterbury, close to Morrill Mill Pond.

Rocky Pond serves as a tributary to Kimball Brook and the Soucook River. It has an area of 78 acres and extends into Loudon and Gilmanton.

Morrill Pond is 19 acres in size, and has an average depth of 16 feet. The pond is surrounded by conservation land on three sides.

Morrill Pond #2 is also called Morrill Mill Pond. At 30 acres in area, it is only four feet deep on average. The pond is surrounded by conservation land.

Oxbow Pond is located adjacent to the Merrimack River just above the Concord/Canterbury political boundary.

Upper Shaker Pond is an artificial pond, created by the Shakers to run their mills. It has an area of five acres, and is five feet deep on average.

Shaker Pond #2 is also an artificial pond created by the Shakers. It has an area of only three acres and has an average depth of only four feet.

Unnamed Pond #2 is also known as "The Channel." It has an area of 14 acres and an average depth of four feet.

The Merrimack River, formed upstream by confluence of the Pemigewassett and Winnipesaukee Rivers in Franklin, flows for 10.4 miles along Canterbury's western border. The river forms the boundary between Canterbury and Boscawen, and is known for its many wild characteristics and varied public recreation opportunities.

Brooks 11, 12, 13, 14

Forrest Pond Brook flows south from Forrest Pond to the Big Meadow.

Shaker Brook flows for six miles into the Soucook River.

Pickard Brook flows for five miles before entering Shaker Brook.

Gues Meadow Brook begins in Canterbury and flows for 4 ½ miles into the Soucook River.

Burnham Brook runs from Horseshoe Pond across the Canterbury border into Concord.

Hayward Brook flows from Morrill Pond.

Hazleton Brook runs through the Big Meadow.

Cold Brook runs beside the Merrimack River.

Big Meadow Brook passes through Canterbury's Big Meadow and then converges with Bryant Brook.

Hydric Soils

Out of the total land acreage of Canterbury (28,672), 10.4% is comprised of hydric soils: ³²

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1678	5.9
Very Poorly Drained - organic base	955	3.3
Very Poorly Drained - mineral base	170	0.6
Marsh	160	0.6
TOTALS	2963	10.4

Watersheds

The Town of Canterbury drains into two major watersheds; the Town's western half lies in the Merrimack River watershed, and the Town's eastern half lies in the Soucook River watershed. 12

Aquifers

A fine-grained stratified drift aguifer underlies the Merrimack River and its surrounding flood plains. Kimball Brook runs along the northeast corner of the Town and is accompanied by a stratified drift aquifer of coarse grain. Another coarse-grained aquifer overlies a fine-grained aguifer just east of the Merrimack.¹⁶

Wetlands

Two major wetlands in Canterbury are Peverly Meadow and the Big Meadow (located between Old Tilton Road, Randall Road, and Route 132). 14,17

There are additional large and valuable wetlands within the Town. A current digitizing effort is underway to identify them. Although Canterbury has no designated prime wetlands to date, it is anticipated that the digitization process can help to identify those wetlands to further evaluate.

Identified Water Resource Priorities

Town officials, volunteers, and the 1998 Master Plan have named the following water resources as being particularly important to the Town: 14, 18

- Shaker Pond
- Morrill Mill Pond
- ******* Bryant Brook ravine and falls
- Burnham Brook watershed
- Carding Mill Pond
- Crane Neck Pond
- Forrest Pond Brook, falls, and gorge
- Horseshoe Pond
- Intervale Lands with Oxbow Ponds
- Kimball Pond
- Merrimack River shoreline banks and gravel bars
- Pickard Brook
- Soucook River Watershed
- Falls on Ben Ladd's land
- Curtis Beaver Ponds
- Gues Meadow
- Flagg Hole Marsh
- Clough Pond
- Shaker Ponds, Meadows, and Canal Area
- Spender Meadow area
- Forrest Pond
- Morrill Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Canterbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Canterbury	Region
First Priority	Designated prime wetlands (tied)	Rivers and streams
Second Priority	Public water supplies (tied)	Aquifers
Third Priority	Rivers and streams	Lakes and ponds
Fourth Priority	Lakes and ponds (tied)	Designated prime wetlands
Fifth Priority	Aquifers (tied)	Watersheds

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their water resources. ³¹

Specific comments included: 31

- ★ We need to identify locations of
- → Greater setbacks/buffers are



springs and watersheds.

needed from wetlands and ponds.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 80% of the entire Town. The following table breaks down the components: ^{8, 20, 21, 22, 29}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Paul and Thelma Ambeau Memorial Forest	private	20
Ayers State Forest	NHDRED	50
Donald Booth Property #1	Town	2
Donald Booth Property #2	Town (LCIP)	24
Brill Lot	Town	61

Burroughs Easement	NHDA	264
Cambridge Drive Parcel	Town	22
Canterbury Center	Town	1
Canterbury Shaker Village	private	694
Crane Neck Pond	Town	4
Curtis Lot	Town	39
Flagg Hole Marsh	Town	18
Hildreth Agricultural Preserve	NH DA	57
Hofman Property #1	Town	29
Hofman Property #2	Town	44
Mary and Quentin Hutchins Forest	SPNHF	88
Ingalls Island	Town	1
Intervale Road Canoe Access	Town	6
Kimball Pond Conservation Area	Town	41
Maxfield Lot	Town	181
Jill McCullough Property #1	NHDA (LCIP)	452
Jill McCullough Property #2	Town (LCIP)	114
Mildred Meeh Property #1	Town (LCIP)	7
Mildred Meeh Property #2	Town (LCIP)	64
Tim Meeh Property #1	Town (LCIP)	67
Tim Meeh Property #2	NHDA (LCIP)	96
Metters Lot	Town	45
Hannah Moore Lot	Town	33
Morrill Mill Pond WMA	State	48
Peverly Meadow Conservation Area	State	10
Prescott Lot	Town	113
Redden Lot - Crane Neck Pond	Town	6
Riverland Conservation Area on the Merrimack	Town	69
Schoodac Conservation and Recreation Area	Town	167
Shaker State Forest	NHDRED	227
Thunberg Lot	Town	25

Town Forest	Town	20
Tracy Lot - Big Meadow	Town	10
Current Use		19,740
TOTAL ACREAGE PROTECTED		22,959

In 1998, Canterbury supported a 100% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials, volunteers, and the Master Plan have named the following land and forestry resources as being particularly important to the Town: 14, 18

- 2 Shaker Forest
- 2 Ayers Forest
- 2 Mary & Quentin Hutchins Forest
- 2 Area of Kimball Pond, Burnham Brook, beaver pond, field and forest
- 2 Area of Merrimack River, with its beaches, banks, and buffers
- Area of Schoodac, Spender meadow, Morrill Mill Pond, and Whitney Hill
- 2 Area of Shaker Ridge, Shaker Meadow, Shaker Ponds, and Gues Meadow Brook
- 2 Area of Sunset Hill, Forrest Pond, and high hills
- 2 Area of Big Meadow

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Canterbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Canterbury	Region
First Priority	Deeded conservation lands	Open space
Second Priority	Agricultural land	Agricultural land
Third Priority	Conservation easements	Conservation easements
Fourth Priority	Town parks and forests	Town parks and forests
Fifth Priority	Open space / State parks and forests (both tied)	Deeded conservation lands

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources. ³¹

Specific comments 31

2 Farmlands should be protected.

Note from the Canterbury Conservation Commission:

The Commission believes the Town should focus its efforts on improving the accessibility of existing conservation areas. This would be accomplished through developing trails and guides while expanding the contiguous land area under protection to enhance the ecological, wildlife, and recreation potential.



Historical and Cultural Resources

National Register of Historic Places

Canterbury has one exemplary site located on the National Register. This site was nominated and listed with the National Register in 1975. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: ^{1, 24}

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Canterbury Shaker Village	6/75	On Shaker Road in the Eastern part of Canterbury	Established in 1792, this collection of finely crafted buildings and furnishings stands as evidence of the Shakers' simple, elegant, and fortified way of life.

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

The Shakers came to Canterbury in 1792. They established themselves as a self-sufficient community, and are remembered for their high moral character, their craftsmanship, and their resourcefulness. A marker resides near their village (located in Loudon on the east side of NH 106, 3 miles north of its junction with NH 129).²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- The Osgoodites, followers of Jacob Osgood, were another religious sect that made their home in Canterbury (1820). Their cemetery, with its old broken gravestones and unusual epitaphs, is located off of Zion Hill. It is one of the few Osgoodite landmarks remaining in Canterbury.
- Jordan Farm is a colonial late 1700's. Ferries crossed



brick farmhouse that dates back to the mid to the Merrimack River near this house.

- A small settlement once inhabited the area near the town line between Canterbury and Loudon. The Maxfield Monument stands at this site in a small cemetery.
- The Blanchard Tavern was built in 1747 at the present day intersection of Route 132 and Kimball Pond (at one time, a well-traveled stagecoach route). It was used as a tavern through the mid to late 1800's, and was remarkably owned by the same family until the late 1900s. It is now a house with an attached barn.

- Old Clough Tavern dates back to 1747-1749. This three-story building had a ballroom on the second floor as well as an alleged "passage-way" that led from the building to a gorge. The tunnel was used during "Indian attacks." The house is now a private residence, located close to Canterbury Center, off of Old Tilton Road (also near a once-traveled stage coach route).
- Canterbury still uses its original Town Hall (1753), although it has been moved five times in its history. It originally stood within the first Town cemetery, but is now located diagonally across the Town Common.
- The old cemetery is located near the present day Town Common. It contains prerevolutionary and revolutionary gravestones, the oldest being that of a young girl. This inscribed gravestone is located near the wooden gate of the cemetery.
- Located off of Route 132, close to the site of the original Canterbury settlement fort (built during the 1730's), is the Captain Jeremiah Clough Cemetery. This cemetery houses the grave of Jeremy Clough, Canterbury's most famous Revolutionary War Soldier.
- At one time an "Old Signpost" stood at the intersection at the foot of Shaker Hill. Erected during the height of stagecoach travel, it gave mileage figures to Concord, Manchester, Montreal, and Boston. The sign is now displayed at Shaker Village.
- The Elizabeth F. Houser Museum was once a one-room brick school house. It was located near the Town Center and was the third school house to be built on that site (1864). This historical museum is open to visitors upon request.
- The Canterbury Elementary School was built between 1956 and 1957 solely by the citizens of Canterbury. President Eisenhower commended the Town for its "community spirit" which had by that time become "typical" of Canterbury! (When the Town church burned in 1943, it too was rebuilt with town labor alone.)

Covered Bridges

Covered bridges once played an integral part of the transportation network of the nineteenth century. Today, they are recognized for their beauty and uniqueness. Although Canterbury no longer has standing covered bridges, the Town once shared one with Boscawen: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Rainbow	1857	1907

Cemeteries

As do many other small Central NH Region towns, Canterbury has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link. Canterbury has 33 private and community cemeteries altogether. Only a few of them are listed below: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Captain Jeremy Clough Cemetery		Off of Route 3
Maple Grove Cemetery	Town	
Center Cemetery	Town	

A comprehensive inventory of cemeteries and their locations is currently being developed by citizens within the Town.

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- cemeteries (many privately owned)
- Canterbury Center
- Shaker Village

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Canterbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Canterbury	Region
First Priority	Cemeteries	Cemeteries
Second Priority	National Register of Historic Places	Cultural interest sites
Third Priority	Museums	Covered bridges
Fourth Priority	Cultural interest sites	National Register of Historic Places
Fifth Priority	Archaeological sites	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations adequately protect their historical and cultural resources. ³¹

Specific comments 31

We need to protect cultural interest sites like the old fort site and Native American landmarks. In addition, we should preserve the names of important place.

B Ecological Resources

NH Natural Heritage Inventory

Two outstanding plant species have been located in Canterbury since the 1930's as well as one outstanding natural community. They have been recorded in the NHI program's database. ²⁷

The Burgrass (Cenchrus longispinus) is threatened in the State, but is not listed as such federally or globally. Canterbury is one of only four locations in New Hampshire that has reported harboring this plant within the last twenty years.

The Green Adder's Mouth (Malaxis unifolia) has been listed as a "very important" species in New Hampshire. This rare plant is threatened throughout the State. Four of the 11 locations that report this plant are found in Canterbury.

A natural community of very high importance is the terrestrial Inland Dune Community. Only two communities like this one exist in the State, one of them in Canterbury.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Canterbury: 15, 18 19

A large riparian corridor is located along the Merrimack River which forms the entire western boundary of the Town, spanning 10.4 miles.

The Boston and Maine Railroad corridor follows the Merrimack River from Canterbury's southern Concord boundary to its northern Northfield boundary. This railroad is no longer in use, but the path it makes offers Canterbury's wildlife a direct way to travel between habitats.

A utility corridor runs along the western boundary of the Town, just east of the old Boston and Maine Railroad. This corridor passes by many brooks and is relatively close to the Merrimack River, making it a well-traveled wildlife path.

Canterbury also offers a wide range of walking, hiking, and biking trails including a hiking trail through the Shaker State Forest and nature trails around Oxbow Pond. Although they were designed for humans, evidence shows that these trails are also used by animals.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Canterbury: ^{14, 18}

A heron rookery has been sighted in the freshwater wetlands of Spender Meadow.

The Morrill Pond Wildlife Management Area is owned and overseen by the NH Fish and Game Department. The pond is surrounded by conservation land and provides a lush, protected environment for a variety of plant and animal life.

The Riverland Conservation area on the Merrimack River is a critical habitat for freshwater wetlands species.

Ayers State Forest is an important forested community, located off of Ayers Road along the northwest boundary of Canterbury.

Identified Ecological Resource Priorities

Town officials, volunteers, and the Master Plan have named the following ecological resources as being particularly important to the Town: 14, 18

- B The Morrill Pond Wildlife Management Area
- B Area of Kimball Pond, Burnham Brook, beaver pond, field and forest
- B Area of Merrimack River, with its beaches, banks, and buffers
- B Area of Schoodac, Spender meadow, Morrill Mill Pond, and Whitney Hill
- B Area of Shaker Ridge, Shaker Meadow, Shaker Ponds, and Gues Meadow Brook
- B Area of Sunset Hill, Forrest Pond, and high hills
- B Area of Big Meadow

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Canterbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Canterbury	Region
First Priority	Plant/tree communities	Scenic vistas
Second Priority	Scenic vistas	Plant/tree communities (tied)
Third Priority	Animal communities (tied)	Greenway corridors (tied)
Fourth Priority	Greenway corridors (tied)	Riparian corridors
Fifth Priority	Biological diversity (tied)	Biological diversity

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources. ³¹

Specific comments 31

B No response

Note from the Canterbury Conservation Commission:

The Commission believes the Town should focus its efforts on improving the accessibility of existing conservation areas through developing trails and guides while expanding the contiguous land area under protection to enhance the ecological, wildlife, and recreation potential.

Several of the Areas mentioned under *Identified Ecological Resource Priorities* abut current and potential conservation areas in neighboring towns. Sharing resources and common conservation goals with provides opportunities for regional Concord, Boscawen, Northfield, and Loudon conservation action.

1 Geologic Resources

Surficial Geology

The Merrimack River is underlain by Flood Plain Alluvium, discontinuous patches of stratified sand and silt. Kames and kame terraces lie in the river's surrounding areas. Isolated Varved Clay Localities also spot this region. Organic deposits are found in various wetlands, and a few small drumlins are scattered in the Town's western side. 12, 14

Additional and perhaps more recognizable geologic formations are the Town's mountains and hills: ^{14, 28}

Elevation
700'

Zion Hill	940'

Bedrock Geology

Almost all of Canterbury is underlain by the Littleton Formation comprised of Undifferentiated Schists and Gneisses. A few regions show concentrations of Pegmatite, and a small patch of Grey Gneiss underlies a tract of land just north of the Shaker State Forest.¹²

Identified Geological Resource Priorities

The 1980 CNHRPC Open Space Plan and the Master Plan named the following geologic resources as being particularly important to the Town: 14, 28

- 1 Ravine with alluvial deposit
- 1 100 feet high bluffs
- 1 Soapstone quarry

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Canterbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Canterbury	Region
First Priority	Bluffs	Mountains and hills
Second Priority	Mountains and hills	Soils identification
Third Priority	Soils identification	Sand and gravel deposits
Fourth Priority	Caves	Bluffs
Fifth Priority	Gorges	Gorges

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their geological resources. ³¹

Specific comments 31

1 We need to protect the soapstone

quarry.



X Recre

Recreational Resources

A variety of recreational opportunities and resources exist in Canterbury that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: $^{18, 29, 30}$

PUBLIC & PRIVATE RECREATION	Type	Location	Acreage / Miles
Oxbow Pond Trail	public	Riverland Conservation Area along the Merrimack River near Exit 17	
Shaker State Forest Hiking Trails	public	Shaker State Forest off of Route 106	1 mile
Shaker State Forest	public	off Route 106	226 acres
Ayers State Forest	public	off of Ayers Road, by the Northfield/Canterbury border	47 acres
Sunset Mountain Fish and Game Club	private	117 West Road	1 acre
Canterbury Elementary School Grounds	public	15 Baptist Road	7 acres
Odyssey House Grounds	private	Shaker Road	42 acres
Riverland Conservation Area	public	by Oxbow Pond	60 acres
Intervale Road Merrimack River Canoe Access	public	off of Intervale Road, on the Merrimack River	5 acres
Canterbury Tractor Pull	private	off Intervale Road, to the northwest	1 acre
Peverly Meadow Conservation Area, Trails and Canoeing	public	Peverly Meadow, on Baptist Road	12 acres
Schoodac Conservation and Recreation Area	public	By Spender Pond in south-central Canterbury, on Welch Road	150 acres
Kimball Pond Conservation Area, Trails and Canoeing		off of Kimball Pond Road	22 acres
Morrill Pond Wildlife Management Area	public	along Morrill Road in south Canterbury	77 acres
Picnic & Rest Area	public	off Interstate 93, at the Canterbury- Northfield border	
Mary & Quentin Hutchins Forest	private	North of the Old School House Road, between Southwest and Pickard Roads	88 acres
Canterbury Center	public	At the intersection of Kimball Pond, Hackleboro, and Baptist Roads	1 acre
NH Sno- Shakers Skimobile Trails	private		5 miles
Town Sump Ice Skating	public		1 acre
Echo Hollow Pony Club and Horse Trails	private		5 miles

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- **★** Canterbury Shaker Village
- **X** Canterbury Center

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Canterbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Canterbury	Region
First Priority	Recreational Trails	Recreational Trails
Second Priority	Beach access	Canoe/boat access
Third Priority	Outdoor sporting fields	Outdoor sporting fields
Fourth Priority	Canoe/boat access	Picnic areas and playgrounds
Fifth Priority	Picnic areas and playgrounds	Beach access

Specific comments 31

- **X** We need to protect the Merrimack River.
- **X** We need more help protecting the existing trail network from being broken apart by development.

Note from the Canterbury Conservation Commission:

The Community Survey of the 1998 Master Plan identified the following as the five most important new recreation facilities. The Conservation Commission strongly believes this list more accurately reflects the sentiment of the Town:

- 1. Hiking trails
- 2. Bicycle paths
- 3. Cross country ski trails
- 4. Swimming pool
- 5. Land acquisition for recreational use



Other Identified Resource Priorities

Town officials, volunteers, and the Master Plan have named the following other, often intangible, resources as being particularly important to the Town: 14, 18

Canterbury would benefit from more regional planning laws to help protect the peaceful, rural character of the area

The Community Survey of the 1998 Master Plan identified the following as the five aspects of Canterbury that should remain the same:

- 1. Uncrowded, quiet living conditions
- 2. Scenic natural environment
- 3. Small town atmosphere
- 4. Canterbury
- 5. Friendly

Shaker Village

people

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Canterbury has established a Conservation Commission, a Historic District Commission, and a Historical Society.

Conservation Commission

Recent activities of the Conservation Commission include: developing Canterbury's new Oxbow Pond Trail, an interpretive nature trail with markers and an illustrated trail guide; laying out new trails in Spender Meadow, one of which will include a viewing blind near a heron rookery; and developing a plan to inventory all of Canterbury's natural and scenic resources. The Commission is currently undertaking a digitization effort of the wetlands within Town. ⁸

Historic District Commission

The Historic District Commission has been helping the Canterbury Planning Board create a special Canterbury Center core district that would protect the historic nature of the Town center. In 1996, they were involved with a project to build a sidewalk between the Town center and the elementary school.⁸

Historical Society

The Canterbury Historical Society oversees a variety of events and projects, and it helps to educate the Town about its heritage. During the spring and fall, the Society hosts a series of very successful evening programs which feature guest speakers and performers. One of the Society's most interesting projects has involved interviewing Canterbury residents in an effort to record the Town's "Oral History." The Historical Society Museum houses many historic artifacts and documents, and is open every Saturday morning from 10 to 12.

ADDITIONAL SURVEY FINDINGS

The following results have been compiled from Canterbury's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ✓ watershed activities
- ✓ agricultural land protection
- ✓ Atlantic Salmon restoration project
- ☑ evaluated, passed, killed, and amended legislation
- ✓ sought easements in important areas
- the Conservation Commission (w/ the help of grant-money) protected and utilized priority areas such as unique wild areas that have trails etc, the Riverland and Intervale Land, and natural lands bordering conservation easements.
- ✓ new wetland walks and plant farms
- ☑ building a walk way and observation deck along the Merrimack River
- ☑ acquired new conservation land for town use
- ✓ developing recreation trails

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- watershed and forestry resource protection programs
- more environmental and conservation education
- resource inventories
- continued utilization of town land for recreation, hunting, nature trails, snowmobiling, and hiking
- re-landscaping the Town center
- repairing pond dams

Essential Factors to Canterbury's "Quality of Life"

- M the Town's rural character and New England landscape
- M community spirit
- M good zoning ordinances and an effective Planning Board and Conservation
- Commission
- M taking care of our natural resources so that all can enjoy them
- M Shaker history
- M volunteers who help to manage our resources and government
- M a rural "can do" attitude
- M Canterbury's 10 year Plan for Tomorrow
- M open space for recreation and wildlife

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Canterbury Zoning Ordinance, 1995
- 7 Town Officials/Employees, 1998
- 8 Canterbury Town Annual Report, 1996
- 9 Canterbury Site Plan Review Regulations, 1991
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 The Town of Canterbury Plan for Tomorrow: 1998
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Canterbury Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

CHICHESTER

Ahout Chichester	
Member of CNHRPC	×
Surveys Mailed	9
Surveys Received for Tallying	2
REPP Meeting Participation	×
Profile Review & Comment by	×

Historical Profile

The area known as Chichester, named for the influential 18th century politician the Earl of Chichester, was granted by the Governor on May 20, 1727. When surveyors first went out to set the boundaries of the new Town they returned with the news that all of the Town of Epsom allegedly fell within the new boundaries of Chichester. Epsom had been granted a few days prior to Chichester and as a result the previous boundaries stayed the same. This kind of boundary discrepancy was common in the history of Central New Hampshire, but it was rare for the error to be so great as to encompass an abutting town. The land was re-surveyed a few years later and the official boundaries of Chichester were set. By the end of the Revolutionary War, two population centers had grown in Chichester; one in the south and one in the north. These two separate population centers began to dispute where town buildings and churches should be placed. As a result of the difficulties spurred by having two separate populations centers, in 1781 the Town voted to divide along the Suncook River, separating the two centers into two different towns: the Town of Chichester and a new town to be called Pittsfield.

Present-Day Profile

The area of Chichester is 13,568 acres, or 21.2 square miles. The Town comprises 2.6% of the CNHRPC area. ²

Over the last twenty-seven years, Chichester's population has grown by 91% while the number of housing units has increased by 119%: ^{3, 4, 5}

GROWTH	Population	<u>Net C</u> #	hange %	Housing Units	<u>Net (</u> #	Change %	
1970 (US Census)	1083	na	na	361	na	na	
1980 (US Census)	1492	+409	+37.8	526	+165	+45.7	
1990 (US Census)	1942	+450	+30.2	724	+198	+37.6	
1997 Population & 1996 Housing (NHOSP)	2072	+130	+6.7	789	+65	+9.0	
TOTAL CHANGE FROM 1970 - 1997		+989	91.3%		+428	118.6%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts Town-Adopted Resource & Conserva	
Conservation-Open Space-Wetlands	Wetland Ordinance
Conservation-Open Space-Steeplands	Aquifer Ordinance
Rural-Agricultural	
Residential	
Commercial-Industrial/Multi-family	
Backlands	

Non-regulatory measures for protecting Chichester's resources include the following: ^{7, 8, 9}

Town Master Plan Elements

Town Conservation Plans, Reports and Studies

Goals and Objectives Element (1997)	
Economic Conditions (1997)	
Land Use (1997)	
Population and Housing (1997)	
Conservation, Preservation, & Use of Resources (1997)	
Construction Materials (1997)	
Town Services and Facilities (1997)	

TOWN RESOURCES



Water Resources

Water Supplies

Chichester has few public water supplies. With the exception of the public water supply at the Central School, those which do exist primarily serve the restaurants and campgrounds of Chichester.

Between 1983 and 1997, the NHDES has issued 85 well permits to residents of Chichester. The majority of them are grouped on Bailey and Burnt Hill Roads (16), Route 4 (6), and Horse Corner Road (11). These new well locations have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13, 14

Lynxfield Pond is a small 14 acre-pond located north of Canterbury Road in west Chichester.

Marsh Pond is the largest pond in Town and is located just north of Route 4 in eastern Chichester.

Rivers 11, 12, 13, 14

The Suncook River forms the northeastern border between Chichester and Pittsfield. This River marked the separating line used by the original Town of Chichester to form modern Chichester and Pittsfield. The River served as an attractant in the early days to the area in the north eastern corner and served in early agrarian industries. From the border the River travels into Pittsfield and then south eventually emptying into the Merrimack River.

The Soucook River flows very near to Chichester's southwestern corner. Although the River does not enter into the Town, it undoubtedly played a role in settlement and industry in the area throughout the Town's history.

Brooks 11, 12, 13, 14

Sanborn Brook flows into the northern portion of Town from Pittsfield. The brook travels several miles in a southerly direction before it joins Perry Brook and shortly after, the Suncook River.

Perry Brook enters the western side of Chichester from Loudon. From where it enters, the brook travels a few miles in a southeasterly direction, joins Sanborn Brook and shortly thereafter enters the Suncook River.

Sanders Brook begins northwest of a small unnamed pond near the center of Town. After the small pond, the brook continues southeasterly and enters the Suncook River.

Mason Brook travels a few miles in eastern Chichester before it enters Epsom and, eventually, the Suncook River.

Burnham Brook Begins just south of Leavitt and Garvin Hill Roads. From there, the brook

travels easterly and into Epsom.

Hydric Soils

Out of the total land acreage of Chichester (13,568), 16.4% is comprised of hydric soils: ³²

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1932	14.2
Very Poorly Drained - organic base	154	1.1
Very Poorly Drained - mineral base	72	0.5
Marsh	63	0.5
TOTALS	2221	16.4

Watersheds

The southwestern quarter of Chichester lies within the Soucook River watershed. The remaining portion of the Town falls into the lower Suncook River watershed. ¹⁰

<u>Aquifers</u>

A fairly large stratified drift aquifer underlies the northeastern area of Chichester. The Suncook River follows this aquifer in a southerly direction through Epsom and along the Pembroke/Allenstown border before it joins the very large Merrimack River aquifer. The portion of the aquifer located beneath Chichester is coarse-grained, overlaying a fine-grained stratified drift aquifer. ¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found along Dover Road, Clifford Road, Sanborn Brook, and Suncook Valley Road. 17

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

→ no priorities were identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Chichester. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Chichester	Region
First Priority	Lakes and ponds	Rivers and streams
Second Priority	Rivers and streams (tied)	Aquifers
Third Priority	Aquifers (tied)	Lakes and ponds
Fourth Priority	Shorelands (tied)	Designated prime wetlands
Fifth Priority	Hydric Soils (tied)	Watersheds

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

- → Soils based zoning is very good.
- → A water resources management



plan is needed.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 58% of the entire Town. The following table breaks down the components: 8, 20, 21, 22

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Rev George and Marion Blackman (LCIP)	Town	73
Rev George and Marion Blackman (LCIP)	Town	18
Rev George Blackman (LCIP)	Town	26
Carpenter Memorial Park	Town	40
Joan and William Cray (LCIP)	Town	8
Joseph and Anne Drinon (LCIP)	Town	145
Five Hill Estates Open Space	Town	40
Madelin Sanborn (LCIP)	Town	8
Madelin Sanborn (LCIP)	Town	22
Spaulding Lot	Town	111
Current Use		7321

TOTAL ACREAGE PROTECTED	7812

In 1998, Chichester did not support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

2 no specific priorities were named

Survey Findings

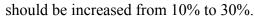
The following table documents the general resource priorities of those who returned surveys from the Town of Chichester. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

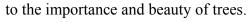
RESOURCE PRIORITIES	Chichester	Region
First Priority	Conservation easements (tied)	Open space
Second Priority	State parks & forests (tied)	Agricultural land
Third Priority	Deeded conservation land	Conservation easements
Fourth Priority	Open space	Town parks and forests
Fifth Priority	Town parks & forests	Deeded conservation lands

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their land and forestry resources. ³¹

Specific comments 31

- 2 The municipal use change tax
- 2 More respect should be given
- 2 Deeded conservation land is





subject to challenge.



Historical and Cultural Resources

National Register of Historic Places

Chichester has no exemplary sites located on the National Register of Historic Places. Often the task of promoting a site to the National Register is grueling and very strong unrelenting support is needed to push the application through the process. No additional regulatory restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. There are no New Hampshire Historical Markers located in Chichester. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- One of the oldest and most historic buildings in Chichester is the Town Hall. The building was originally constructed around 1791 and has since been moved four times. The building originally served as a meeting place and as a church.
- Two churches built in the early 1800's, a Baptist Church and a Congregational Church, replaced the Town Hall as the Town's churches.
- Several old, historic cemeteries exist in Chichester. Two in particular are the Pine Ground and Leavitt Cemeteries.
- Two historic mills once operated in Chichester, Elijah Sander's Mill and Ordway's Mill.
- The Haine's Family Store was in operation in the 19th century. The family also operated a carriage and sleigh factory at this location.
- In the southwest corner of the Town, a Native American village once stood.
- An area know as Horse Corner played a role in local legend during the Revolutionary War Era. Legend has it that a British soldier deserted his regiment and stole a horse from a local farmer. Horse Corner is where the horse was later found, but there was no sign of the soldier.
- Three historic buildings once used as schools still exist in Chichester. The Horse Corner, Pine Ground, and Kelly Corner Schools have all been converted into private homes.
- Several homes built in the late 18th and early 19th centuries are located in Chichester.
- Of particular note are the Shaw House, Langmaid Farm, Lamb House, and Garvin Hill.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although there are no records of any being constructed in Chichester they played an important role in building the infrastructure in the surrounding communities. ²⁶

Cemeteries

As do many other small Central NH Region towns, Chichester has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: 8, 14, 18

CEMETERIES	Owner	Parcel Number / Location
Edgerly-Knowlton Cemetery	Town	at inter. of Horse Corner and Land Roads
Locke Cemetery	Town	on Dover Road
Morrill Cemetery	Town	off Horse Corner Road
Pineground Cemetery	Town	
Brown Cemetery	Town	on Ring Road
Kaime Cemetery	Town	on Kaime Road
Edmund's Cemetery	Town	on Main Street
Hook Cemetery	Town	on south side of Dover Road
Leavitt Cemetery	Town	on Canterbury Road

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

cemeteries

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Chichester. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community's respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Chichester	Region
First Priority	Town pounds	Cemeteries
Second Priority	Cemeteries	Cultural interest sites
Third Priority	Covered bridges (tied)	Covered bridges
Fourth Priority	Museums (tied)	National Register of Historic Places
Fifth Priority	Unique stone walls	Archaeological sites

Half of the respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources, while half disagreed. ³¹

Specific comments 31

Town regulations and historical resources.



ordinances should identify and help preserve

B Ecological Resources

NH Natural Heritage Inventory

The NH Heritage Inventory is comprised of locations and listings of rare species and natural communities found in different communities around the State. For a species or habitat to be listed as located in a certain town, the creature or habitat must be located, identified and reported to the appropriate persons. Currently there are no species or habitats listed for the Town of Chichester.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area.

A riparian corridor is located along the Suncook River which forms the northeastern boundary of the Chichester, separating it from Pittsfield. 15, 18 19

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more biodiversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. At this time, no natural communities have been identified in Chichester. ¹⁸

Scenic Roads and Vistas

Although no specific roads or vistas have been named, Main Street offers a windy, historic tour

through the center of Town while exposing the views of the surrounding hillsides.

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

B no specific resources have been identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Chichester. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Chichester	Region
First Priority	Scenic vistas	Scenic vistas
Second Priority	Plant/tree communities	Plant/tree communities (tied w/3rd)
Third Priority	Deeryards	Greenway corridors (tied w/2nd)
Fourth Priority	Greenway corridors	Riparian corridors
Fifth Priority	Bio-diversity	Bio- diversity

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

B Scenic vistas need protection.



Geologic Resources

Surficial Geology

The northern two thirds of Town are characterized by smooth drumlin hills. In the southern central part of Town many steep slopes of a >15% grade can be found. The eastern area of Town is low lying meadows and subject to occasional flooding by the Suncook River. Rocks and boulders of all sizes dot the landscape as reminders of the last glacier's passage. ¹⁴

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Garvin Hill	978'

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

1 no specific resources were identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Chichester. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Chichester	Region
First Priority	Mountains and hills (tied)	Mountains and hills
Second Priority	Gorges (tied)	Soils identification
Third Priority	Soils identification	Sand and gravel deposits
Fourth Priority	Caves	Bluffs
Fifth Priority	None selected	Gorges

Half of the respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources, while half disagreed. 31

Specific comments 31

1 There are limited geologic features located within Chichester

X

Recreational Resources

A variety of recreational opportunities and resources exist in Chichester that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Hillcrest Campground	private	off Route 4	50 acres
Central School	public	off Route 28	5 acres
Deer Meadow Pond	public	off Route 28 - very near Epsom border	1 acres
Deer Meadow Pond boat access	public		
Carpenter Memorial Park	public	off Route 28	35 acres

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

× no additional priorities have been named

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Chichester. Although the results are not statistically significant, they do give an important indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Chichester	Region
First Priority	Outdoor sporting fields	Recreational trails
Second Priority	Picnic areas	Canoe/boat access
Third Priority	Recreational trails	Outdoor sporting fields
Fourth Priority	Canoe/boat access	Picnic areas and playgrounds
Fifth Priority	Beach access	Beach access

Specific comments 31

Public is not provided with much



information regarding public facilities

Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

- citizen education on zoning on planning
- * historic district

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Chichester has helped establish a Historical Society. In addition, Chichester has a Conservation Commission.

Historical Society

Recent activities of the Society have concentrated on the new museum. This year they have had three exhibits: "Celebrating 100 years of the Automobile", "Farming in Chichester", and an exhibit on "Chichester Schools".

Conservation Commission

No information is available from past Town Annual Reports on the activities of the Commission.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Chichester's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ the development of a Chichester recycling program
- added 12 acres to the Town forest developed nature trails at Marsh (Great Meadow) Pond
- developed nature trails at Marsh (Great Meadow) Pond

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- wetland delineation and cataloging
- bike trail along the old Suncook Valley Railroad embankment
- develop a Town beach at Deer Meadow Marsh

Essential Factors to Chichester's "Quality of Life"

- M good schools
- M low taxes
- M growth management
- M citizen involvement

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
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- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Chichester Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

CONCORD

About Concord	
Member of CNHRPC	✓
Surveys Mailed	40
Surveys Received for Tallying	8
REPP Meeting Participation	1
Profile Review & Comment by	*

Historical Profile

Concord's earliest roots are traced to a small trading post established in 1659. Settlement was rapid as the location was militarily, as well as agriculturally, strategic. The settlement was incorporated by Massachusetts in 1733 under the name Rumford. On June 7, 1765 the province of New Hampshire granted a town described as "a parish of Bow...by the name of Concord". Some controversy erupted as to who held the rightful claim to the land, be it New Hampshire or Massachusetts. It was determined to be New Hampshire, but the Town remained a parish of Bow by the name of Rumford. A short time following, the King in London favored the formation of a town by the name of Concord. Concord's location adjacent to the Merrimack River continued to help it grow into a large agricultural and trading community. In 1801, the legislature began meeting in Concord, and in 1816, the Town was formally designated the state capitol. From the late 19th and into the 20th century, Concord became the last main stop for rail passengers heading north to the hotel resorts. Since then, the City has continued to grow and meet the changing needs of the future. ¹

Present-Day Profile

The area of Concord is 41,920 acres, or 65.5 square miles. The Town comprises 8.1% of the CNHRPC area ²

Over the last twenty-seven years, Concord's population has grown by 26% while the number of housing units has increased by 70%: ^{3, 4, 5}

GROWTH	Population	<u>Net Cl</u> #	nange %	Housing Units	Net C	Change %	
1970 (US Census)	30022	na	na	9547	na	na	
1980 (US Census)	30400	+ 378	+ 1.3	12126	+ 2579	+ 27.0	
1990 (US Census)	36006	+ 5606	+ 18.4	15697	+ 3571	+ 29.4	
1997 Population & 1996 Housing (NHOSP)	37925	+ 1919	+ 5.3	16228	+ 531	+ 3.4	
TOTAL CHANGE FROM 1970 - 1997		+ 7903	+ 26.3%		+ 6681	+ 70.0%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the City has adopted a number of land use controls to facilitate conservation: ⁶

1998 Conservation-Sensitive

City Zoning Districts	City-Adopted Resource & Conservation Ordinances
Country District	Wetland Development Ordinance
Agricultural District	Cluster Development Ordinance
Conservation District	Excavation Regulations
Watershed District	Historic Preservation Ordinance
Historic District (Overlay)	Floodplain Development Ordinance
Architectural Design District (Overlay)	Conservation Protection Ordinance
Flood Plain District (Overlay)	Shoreland Protection Ordinance
Floodway District (Overlay)	
Stream Bank & Shoreline District (Overlay)	
Wetland District (Overlay)	

Non-regulatory measures for protecting Concord's resources include the following: $^{7,\,8,\,9}$

2010 City Master Plan Elements City Conservation Plans, Reports, and Studies

Planning Factors (1993)	Broken Bridge Swimming Area Study (1942)	
Goals, Objectives and Policies (1993)	Merrimack River at Concord (1956)	
Land Use Plan (1993)	Oak Hill - An Environmental Study (1977)	
Conservation and Open Space (1993)	A Legacy for Future Generations - An Open Space Plan (1978)	
Transportation (1993)	Soucook River Corridor Study (1980)	
Housing (1996)	The Turkey River - Basin and Watershed (1983)	
Community Recreation (1993)	A Wetland Index (1982)	
Public Facilities (1993)	Merrimack River Corridor (1986)	
Utilities (1993)	Penacook: A Sense of Place (1986)	
Economic Development (1993)	Contoocook River Corridor Study (1987)	
Historic and Cultural Resources (1993)	Assessment of the Concord Segment of the Merrimack River (1987)	
	Sewalls Falls Master Plan (1989)	
	Brooks - A 1990 Study (1990)	
	Recreation (1990)	
	Merrimack River Greenway and Trail System (1990)	
	Merrimack River Charrette (1992)	
	Turkey River Basin Plan (1993)	
	Endowment for the 21st Century - Conservation & Open Space Plan (1993)	
	Garvins Falls Urban Reserve Development Feasibility Study (1996)	
	Concord Trail System (1997)	

CITY RESOURCES

♦ Water Resources

The City of Concord is criss-crossed by many streams, brooks, and rivers and is dotted by several lakes and ponds of various sizes. Concord's proximity to the Merrimack River and other major water sources have played a important role since the earliest Native American settlements in the area

Water Supplies

Long Pond, or Penacook Lake, serves as the main water source for the City. This 359-acre pond is the largest and most pristine in the Concord area. The lake has been raised by damming and is kept scrupulously clean by the City. Most of Concord's residents receive water from Penacook Lake through the City's water supply system. Although the depth varies somewhat with rainfall and seasonal changes, one study reported it as nearly 75 feet deep. 11

Between 1983 and 1997, the NHDES has issued 196 well permits to residents of Concord. The majority of them occur on the newer subdivisions: Brookwood Drive (10), Fox Run (7), Freedom Acres Drive (7), Hoit Road (17), Pinecrest Circle (16), Spillway Lane (7), and West Parish Road (8). These new well locations have been mapped by NHDES, and their patterns are indicative of new development in the northeastern section of the City. 10

Ponds 11, 12, 13, 14, 32, 33, 34, 35

Long Pond, or Penacook Lake, serving as the City's water supply, is 359 acres in area.

Turkey Pond is Concord's second largest pond with an area of 172 acres. This pond, located in southwest Concord, is a natural pond raised by damming.

Turtle Pond is a large eutrophic pond 121 acres in size. Located off of Oak Hill Road in East Concord, a public boat access allows fishing and relaxing amidst the surrounding vegetation.

Hot Hole Pond shares its shores with both Concord and Loudon. This mesotrophic 31-acre pond is fairly deep, having a maximum sounded depth of 41 feet.

Snow Pond is a small eutrophic 20-acre pond located between Shaker Road and Snow Pond Road with an average depth of 12 feet.

Little Turkey Pond lies adjacent to Turkey Pond in southwest Concord. This pond is only 20 acres in size and has an average depth of 14 feet.

Goodwin Pond is a small 18-acre pond with an average depth of 10 feet.

Sugar Ball Pond is a 12-acre pond with an average depth of only seven feet.

Fort Eddy Pond, an ox-bow, is located in central Concord near the New Hampshire Technical Institute (NHTI), a remnant of the meanders of the Merrimack River.

Horseshoe Pond is a natural ox-bow mesotrophic pond on the western side of the Merrimack. In

early settlement times, the pond with its nearby flat, fertile agricultural soils was an invaluable resource.

There are a few small unnamed ponds dotting Concord. Two near St. Paul's School have long served the students on hot summer days.

The Merrimack River is the main river in central and southern New Hampshire, bisecting Concord in a northerly-southerly direction. Concord owes much of its early prosperity to the Merrimack and today it continues to add to the City's unique character. On occasion, the Merrimack has spilled over its banks and flooded low-lying areas of Concord, reminding the residents that the river remains a powerful force in the Region.

The Soucook River forms the border between Concord and Pembroke. In dry conditions, this rivers slows to a stoney crawl as it flows from Loudon to the Merrimack River near Bow. In wet conditions, however, this river swells several feet and moves swiftly towards the Merrimack. The Soucook, primarily a wild, unused river, is habitat to a wide variety of wildlife.

The Contoocook River meanders into Concord's northwest region where it is joined by a few more streams before it enters the Merrimack, just north of Concord in the Town of Boscawen.

The Turkey River originates near the two Turkey Ponds in southwest Concord. From there, the river is joined by many small streams and brooks in the area before it enters Bow and ultimately empties into the Merrimack River.

Brooks 11, 12, 13, 14, 32, 33, 34

Little Pond is where Bow Brook originates and starts its five mile journey through Concord and into Bow, where the brook enters the Turkey River.

Ash Brook originates in the Town of Hopkinton. It then enters Concord at the City's middle western edge and travels about four miles into Little Turkey Pond.

Beaver Meadow Brook begins near the Long Pond/Penacook Lake watershed and travels 3.4 miles to where it enters the Merrimack River just south of Sewall's Falls dam.

Hayward Brook is joined by Hackett Brook near the Canterbury town line and then continues 3.2 miles, entering the Merrimack just north of Sewall's Falls Road.

Snow Pond Outlet Brook flows from the northeast of Shaker Road for 2.8 miles to join Hayward Brook under I-93.

Hackett Brook originates in the far northern corner of East Concord at Hot Hole Pond, traveling south 2.7 miles to Hayward Brook.

Rattle Snake Brook, so-named for the timber rattlesnakes which once inhabited the area, travels 2.5 miles southeast to the Merrimack from its starting point at the northern end of Long Pond/Penacook Lake.

Burnham Brook enters Concord near Mountain Road and travels 1.8 miles to the Merrimack River

Mill Brook begins at the southern end of Turtle Pond in East Concord and travels about 1.3 miles to the Merrimack

Hoyt Brook starts its 1.2 mile journey at the "Great Bog" in Penacook and travels to just north of Sewall's Falls Road where it flows into the Merrimack River.

Turee Brook begins at Turee Pond in Bow, entering Concord to flow just 1.1 miles into Turkey Pond.

Cemetery Brook begins in the eastern section of the City near Broken Ground and travels slightly less than one mile into the Soucook River.

Bowen Brook begins just east of Mountain Road and makes a short trip into the Merrimack.

Bela Brook travels only 1.25 miles, of its total 6.0 mile length, in the City of Concord. This brook originates in Dunbarton and travels into Concord, draining into Turkey Pond.

Woods Brook travels 0.6 miles from Little Pond through the center of Concord and into Horseshoe Pond

Wattanummon's Brook begins at Horseshoe Pond and travels just short of a mile into the Merrimack River. The brook was so named for a Native American who resided on the island of Horseshoe Pond and refused to relocate when the settlers moved into the area.

White Brook enters Concord from Bow and travels 0.4 miles to where it joins Bela Brook.

Unnamed Brook A begins near Broken Ground, coursing 0.8 miles to the Soucook River.

Unnamed Brook B begins just above Josiah Bartlett Road and meanders 0.6 miles to the Soucook River

Hydric Soils

Out of the total land acreage of Concord (41,920), 16% is comprised of hydric soils: 14,36

HYDRIC SOILS	Acreage	Total Percentage of City
Poorly Drained	4030	9.6
Very Poorly Drained - organic base	1286	3.1
Very Poorly Drained - mineral base	1383	3.3
TOTALS	6699	16%

Within Merrimack County, Concord occupies approximately 7% of the total land area. Of significance, the City contains more than 14% of soils that have been identified as prime agricultural soils in Merrimack County. 34

Watersheds 10, 34, 35

The Merrimack River watershed encompasses the majority of the City in a northerly-southerly direction; the River itself bisects the western "downtown" section from the eastern "Heights" section of Concord.

The Soucook River watershed rests upon the highest-yielding groundwater aquifer in Central New Hampshire. The watershed, spanning into Pembroke, Loudon, Canterbury, and Chichester, contains both undeveloped and industrial properties.

The Contoocook River watershed covers the northwestern portion of Concord, also spanning the towns of Hopkinton, Henniker, Hillsborough, Deering, Webster, Warner, Salisbury, Wilmot, Bradford, and Sutton in the CNHRPC Region.

Sub-watersheds 33, 34

Penacook Lake Watershed in central Concord encompasses 830 acres. As the primary source of potable drinking water for the city, Penacook Lake in underlain by granite and is bounded by portions of Jerry, Pine, and Rattlesnake Hills. The largest landowner within this important subwatershed is the City itself.

The Turkey River Watershed covers approximately 24,063 acres, 39% of which lie within southwestern Concord.

Aquifers 6, 16

The highest-yielding stratified drift aquifer in Central New Hampshire is located under the Soucook River and at the confluence of the Merrimack, Soucook, and Suncook Rivers. A preliminary analysis indicates that the riparian corridors of the three rivers at this prime location are zoned industrial and commercial. The portion of the aquifer located under the Merrimack is primarily held by fine-grained stratified drift, while the portion under the Soucook is coarse-grained overlying fine-grained stratified drift.

A large independent aquifer can be found underneath the Turkey River watershed.

Encompassing Great Turkey Pond, Little Turkey Pond, Turkey River, and their surrounding areas, the aquifer consists of large fine-grained stratified drift.

A small aquifer, comprised of coarse-grained stratified drift, is located under Snow Pond.

Wetlands 17

The City of Concord is dotted by many small and a few large wetlands. One of the larger wetlands lies in the Turkey River and Turkey Ponds area, also fed by the proliferation of groundwater. The majority of its acres under conservation, this wetland stretches from the northern parts of the Turkey Ponds into Bow along Turee Brook.

Another large wetland is located in an area north of Long Pond/Penacook Lake. Bog Road travels though the middle of this large wetland. A third large wetland, portions of which are under conservation, surrounds Turtle Pond in East Concord.

Smaller wetlands can be found in the areas of Snow Pond, Hackett Pond, Washington Street in Penacook, Bowen Brook, and between East Side Drive and I-93. Many more small wetlands can be found along all the brooks, rivers, and streams and Concord.

Identified Water Resource Priorities

City officials and volunteers have named the following water resources as being particularly important to Concord: ¹⁸

- ★ Merrimack River
- → Contoocook River
- → Soucook River
- → aquifers
- → Long Pond/Penacook Lake
- → Horseshoe Pond
- → all the "little" streams and brooks
- → Turkey River
- → Turkey Ponds

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the City of Concord. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Concord	Region
First Priority	Aquifers	Rivers and streams
Second Priority	Rivers and streams	Aquifers
Third Priority	Public water supplies	Lakes and ponds
Fourth Priority	Floodplains	Designated prime wetlands
Fifth Priority	Designated prime wetlands	Watersheds

The majority of the respondents felt that the City's ordinances and regulations do not adequately protect their water resources. ³¹

needed.

Specific comments included: 31

- † There should be no additional use in the watershed around the water supply.
- **→** Improved shoreline protection is needed.
- + The floodplain should be protected from development, not from flooding.
- + Upgrading protection ordinances and creating larger set-backs are necessary.
- + The floodplain regulations

and ordinances need state support.

→ Tougher enforcement is



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 72% of the entire City. The following table breaks down the components: ^{7, 8, 20, 21, 22, 33, 34}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Abbott State Forest	NH DRED	35
Airport Bluff and Floodplain	City	145
Allen State Forest	NH DRED	25
Barne Property	City	4
Beaver Meadow Undeveloped Area	City	35
Bela Brook - Aranosian easement	City	10
Bela Brook - Previte easement	City	4
Birchdale/Clinton Street Area	City	166

Blood Agricultural Preserve	NH DA	103
Blood Agricultural Preserve - SPNHF	NH DA	58
Blye Farm Open Space	City	20
Broad Cove Forest	City	116
Bois de Brodeur Trust easement	City	33
Bow Brook Property	City	1
Brookwood Open Space	City	8
Capital Region Health Care easement	City	17
Carter/Keller easement	City	1
Chocorua Village Open Space	City	4
Cilley State Forest	NH DRED	165
City of Concord Land	City	18
City Pound	City	18
Claremont/Concord Railroad Bed	City	14
Claremont/Concord Railroad Bed easement	City	7
Clark Property	City	15
Clinton Street Lots	NH DOT	28
Colby easement	City	1
Compensation Funds of NH easement	City	2
Conrad Property easement	City	12
Conservation Center	SPNHF	96
Contoocook Island Park	City	43
Cranmore Ridge Open Space	City	5
Deer Park	City	3
District 5 State Forest	NH DRED	88
Estes Forest	City	43
Floodway Area - Hall Street	City	50
Garvins Falls	private	1020
Governor's Woods easement	City	8
Hannah Dustin Historic Site	City	1
Hitchcock Clinic easement	City	8

Hooksett Turnpike Area Hot Hole Pond Boat Access Hyland Property I-89 Lot Island Shores Estates Open Space Karner Blue Refuge Area # A Karner Blue Refuge Area # B Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	City City NH DOT City	39 3 34 56
Hyland Property I-89 Lot Island Shores Estates Open Space Karner Blue Refuge Area # A Karner Blue Refuge Area # B Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	City NH DOT	34
I-89 Lot Island Shores Estates Open Space Karner Blue Refuge Area # A Karner Blue Refuge Area # B Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	NH DOT	
Island Shores Estates Open Space Karner Blue Refuge Area # A Karner Blue Refuge Area # B Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain		56
Karner Blue Refuge Area # A Karner Blue Refuge Area # B Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	City	50
Karner Blue Refuge Area # B Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain		14
Keating easement Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	NH F&G	8
Ketcham easement Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	NH F&G	21
Kimball easement Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	City	32
Kimball Lot easement - shared w/ Hopkinton (LCIP) Knight Park Ladd Property Landfill Floodplain	City	3
Knight Park Ladd Property Landfill Floodplain	City	62
Ladd Property Landfill Floodplain	Concord/Hopkinton	178
Landfill Floodplain	City	15
-	City	7
I ama accompant	City	30
Lang easement	City	10
Lehtinen Park	City	170
Locke Wetland	City	41
Mack/Emerson Lot	City	66
Mast Yard State Forest	NH DRED	175
Maxfield Lot	City	181
Christa McAuliffe Planetarium	NH Cultural Affairs	1
Memorial Field (LCIP)	City	38
Merrill Park Undeveloped Area	City	11
Merrimack River Access	City	7
Anthony Merullo Jr. (LCIP)	City	25
Mitigation Wetland	City	4
Morono Park	City	47
Newell Property easement	City	2
NH State Prison and Quarries		
NH Technical Institute Island Reserve	NH DOC	480

NH Technical Institute - Low Area	City	30
Nichols Natural Area	private	79
Oak Hill	City	219
Oak Knoll Estates easement	City	2
Oak Knoll Open Space	City	18
Pembroke Water Works	City	16
Penacook Lake Watershed	City	850
Prince easement	City	2
Quarries	City	80
Randall Property	City	23
Reforestation Lots and Woodland (misc)	NH DOC	242
Reno easement	City	21
Richards Community Forest easement	City	114
Ridge Road Development easement	City	1
Riley Property	City	66
Rolfe Park Undeveloped Area	City	14
Ross Agricultural Preserve	City	75
Rundlett and Conant Schools	School Dist	26
Russ Martin Park (LCIP)	City	29
Russell - Shea State Forest	NH DRED	125
Fredrick Rust III (LCIP)	NH F&G	37
Sewalls Falls Dam	NH Watr Res Council	94
Sewalls Falls easement	City	1
Sewalls Falls WMA # 1	NH F&G	99
Sewalls Falls WMA # 2	NH F&G	29
Sewalls Falls WMA easement	City	8
Silk Farm Wildlife Sanctuary	ASNH	5
Silk Farm Wildlife Sanctuary - Holden	ASNH	15
Snow Pond Conservation Area	City	47
South Concord Meadows easement	City	20
South End marsh	City	19

Spofford Farm easement	City	33
St. Paul's School	private	1879
Stevens Property	City	72
Taylor State Forest	NH DRED	10
Thunberg Lot easement	City	25
TPK Trust - Smith easement	City	3
Turtle Pond	City	22
Turtle Pond Boat Access	NH F&G	1
Turtle Pond East	City	192
Turtle Pond Village easement	City	2
Turtletown Pond WMA	NH F&G	16
Upton - Morgan State Forest	NH DRED	21
Verres Financial Corp easement	City	5
Dorothy Walker Property	City	35
Walker State Forest	NH DRED	51
Walmart Stores easement	City	11
Wedgewood Drive Open Space	City	3
Weir Road Lot	City	57
Well Buffer Area	City	25
West Iron Works Road State Forest	NH DRED	42
West Terrill Park	City	50
West Village Open Space	City	15
White Farm	NH DRED	113
White Farm	School Dist	30
Doris B Wilson easement	City	1
Woodman easement	City	178
Current Use		20172
TOTAL ACREAGE PROTECTED		29975

In 1998, Concord supported a 25% land use change tax allocation, with no cap, to be directed to the Conservation Fund for additional land acquisition. 23

Identified Land & Forestry Resource Priorities

City officials and volunteers have named the following land and forestry resources as being particularly important to the Concord: ¹⁸

- 2 City forests
- 2 all undeveloped lands
- 2 lands along the Merrimack River
- White Farm area
- 2 Turkey River Trust holdings
- 2 Oak Hill trails & recreation areas
- 2 Open spaces
- 2 Carter Hill orchards

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the City of Concord. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Concord	Region
First Priority	Open spaces	Open spaces
Second Priority	Agricultural lands	Agricultural lands
Third Priority	Conservation easements	Conservation easements
Fourth Priority	Deeded Conservation lands	Town parks & forests
Fifth Priority	Orchards	Deeded conservation lands

All of the respondents felt that the City's ordinances and regulations do not adequately protect their land and forestry resources. ³¹

Specific comments 31

- 2 Additional purchases and easements of conservation lands is needed.
- 2 Increased protection of open spaces is needed.
- 2 Increased protection of greenways is needed.
- 2 City ordinances & regulations should be revised.
- 2 Increased protection of agricultural lands is needed
- 2 A greater acceptance of the transfer of development rights is needed from the public.
- 2 Better control of development in residential areas is needed.



Historical and Cultural Resources

National Register of Historic Places

Concord has *many* exemplary sites located on the National Register, all of which were nominated and listed in the 1970's & 1980's. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: ^{1, 24}

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Old Post Office	8/73	North State Street	Now houses State Legislative Office Building
Concord Historic District	6/75	N State Street, Horseshoe Pond, B&M RR, Church Street	Contains site of 1788 Ratification of Federal Constitution
Eagle Hotel	9/78	110 North Main Street	
Franklin Pierce Manse	10/79	52 South Main Street	House owned by 14th President of US
Merrimack County Courthouse	11/79	163 North Main Street	
Merrimack County Bank	2/80	214 North Main Street	
Upham - Walker House	5/80	18 Park Street	
White Farm	5/81	144 Clinton Street	
Farrington House	3/82	30 South Main Street	
Foster - Rueben House & Cleaves - Perley House	3/82	64 & 62 North Main Street	
Leavitt Farm	3/82	103 Old Loudon Road	
Chamberlin House	8/82	44 Pleasant Street	
White Park	11/82	Bounded by: Washington, Centre, High, Beacon, White Streets	One of the oldest municipal parks in NH
Concord Civic District	12/83	Government Area Downtown Concord	
Henry J. Crippen House	12/83	189-191 North Main Street	
Gov. Frank West Rollins House	3/84	135 North State Street	
Pleasant View Home	9/84	2071 Pencant Street	Christian Science home

			of Mary Baker Eddy
Millville School	11/85	2 Fiske Road	
Louis Jr. Downing House	9/87	33 Pleasant Street	
Endicott Hotel	5/87	1-3 South Main Street	
NH Savings Bank	6/88	97 North Main Street	
Beaver Meadow Brook Archeological Site	6/89	- Restricted -	

Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. There are nine historical markers in the City of Concord. These markers demonstrate Concord's rich history as well as the spirit of its citizens, since citizen petition is the first step to a location receiving a marker. ²⁵

The State Capitol Building was constructed in 1819 with granite cut from Concord's quarries. It is the oldest State Capitol in which a still legislature meets in its original chambers.

An elegant house built in 1836 stands back from Mountain Road near Exit 16 on Interstate 93. This is the Bridges House, which has continued to serve as the official Governors' Residence since 1969

Mary Baker Eddy founded the first Church of Christ, Scientist in Boston ,Massachusetts. Her Pleasant View House served as a retirement home for practitioners and nurses until 1975 and is listed (above) on the National Register of Historic Places.

The 14th president of the United States, Franklin Pierce, is remembered with a marker near his burial site in the Minot enclosure.

A marker stands where the Old North Meeting House once stood. The Ratification of the Federal Constitution took place in this meeting house. Delegates from 175 NH towns met to make New Hampshire the 9th state to ratify the Constitution.

The only house Franklin Pierce, 14th President of the United States, owned in Concord is located with a marker and is also listed (above) on the National Register.

A marker stands in remembrance of the Abbot-Downing Company. This company brought the name Concord to the far reaches of the United States and the World through its famous line of transportation, the Concord Coach.

White Park is deserving of a marker as it is one of the oldest municipal parks in the State of New Hampshire, and is also listed (above) on the National Register.

A second marker resides on the property called White Park to commemorate the oldest after-

dinner baseball league in the United States, the Sunset League.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

The Gas House, located near the intersection of Routes 3A and 3, is a local historical building. This building served as the junction for all the original gas lines in the City of Concord and was built in the 1800s.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Concord no longer has standing covered bridges, ten once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Sewalls Falls	1853	1915
RR #5 - Federal	unknown	1907
Federal	1850	1872
Bridge Street - River	1841	1894
Lower	1849	1915
RR #121 - Riverhill	1884	1913
RR #124 - Mast Yard	1870	unknown
Bridge Street - RR	1869	1931
Borough	1846	1952
Main Street - Penacook	1848	1874

Cemeteries

As do many small Central NH Region communities, the City of Concord has a rich heritage and a strong connection to its past. Cemeteries, both City owned and small, private family plots, are an important and personal link. Listed here are the more prominent cemeteries of Concord: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Blossom Hill Cemetery	City	North State Street
Beth Jacob Cemetery	City	North State Street
Cavalry Cemetery	City	North State Street
Maple Grove Cemetery	City	Fisherville Road
Woodlawn Cemetery	City	Route 3 (Penacook)
Penacook Cavalry Cemetery	City	Church Street (Penacook)
Pine Grove Cemetery	City	Cemetery Street

Old Fort Cemetery	City	Oak Hill Road
Soucook Cemetery	City	Beth Jacob Road
Old North Cemetery	City	near Walker School
Melville Cemetery	City	Pleasant Street, near St Paul's School
Horse Hill Cemetery	City	near Elm Street (Penacook)
Stickney Hill Cemetery	City	Stickney Hill Road

Identified Historical Resource Priorities

City officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to Concord: ¹⁸

- Turkey River mill sites
- Mill Brook dam sites
- cemeteries
- = churches
- quarries
- Abbot-Downing site
- Gas House
- Beaver Meadow Brook dam sites
- historic neighborhoods
- historic sites
- mill sites on Contoocook River
- Sewalls Falls Dam and generator sites
- archeological sites
- St. Paul's School
- White Farm
- Garvin's Falls
- Phoenix Hall

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the City of Concord. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Concord	Region	
First Priority	Archeological sites	Cemeteries	
Second Priority	Cultural interest sites	Cultural interest sites	
Third Priority	National Register of Historic Places	Covered bridges	
Fourth Priority	Cemeteries	National Register of Historic Places	
Fifth Priority	Mill sites	Archaeological sites	

The majority of respondents felt that the City's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

- Protection of stone walls is needed.
- More protection for archeological sites is needed.
- Identification and signage of cellar holes and other cultural sites located on City property are needed.
- More protection of historic sites



in general is needed.

B Ecological Resources

NH Natural Heritage Inventory

Many outstanding plant, animal, and insect species have been located in Concord as well as several outstanding natural communities. These valuable ecological resources have been identified and reported to the NH Division of Resource and Economic Development so that they may be placed, if warranted, on the NH Natural Heritage Inventory. ²⁷

Some rare and very rare species of plants are located within the City of Concord. The most endangered include: Blunt-Leaved Milkweed, Burgrass, Duckweed, Golden-Heather, Houghton's Umbrella-Sedge, Large Whorled Pogonia, and Wild Lupine.

A few unique birds have found their way into Concord's borders. Two of the most threatened include the Common Nighthawk and the Purple Martin.

Two rare reptile species have been sighted in Concord within the last twenty years, the Blanding's Turtle and the Spotted Turtle.

Many rare species of insects are located within Concord. Some of the rarest include: Frosted Elfin, New Jersey Tea Span Worm, Pesius Dusky Wing, and Pine Barrens Zanclognatha Moth. Possibly the rarest invertebrate, the only one listed as endangered on both the State and Federal

registers, found in Concord is the Karner Blue Butterfly. This beautiful butterfly has been sighted in Concord within the last twenty years and only one other time elsewhere within the State.

The Brook Floater is the only listed mollusk found in Concord.

Several additional species which are found in Concord and not listed in this brief summary are listed on the NH Natural Heritage Inventory. For a complete listing please refer to **Appendix E**.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Concord: 15, 18 19

A large railroad corridor, the Boston and Maine, stretches the length of Concord along the Merrimack River. This is one of the few stretches of track in the Central New Hampshire Region of which portions are still used for freight travel. Although this track is privately owned and portions of it are still utilized, much of the track is rarely used and thus has the potential to be a viable wildlife and recreation corridor.

A large utility line corridor travels the length of the eastern side of the city. This corridor travels through many sparsely populated areas and travels adjacent to a Pitch Pine/Scrub Oak Barrens natural community, making it an excellent corridor for wildlife travel.

Several riparian corridors exist in along the rivers in Concord. Along the undeveloped and lesser developed portions of the Merrimack, Contoocook, Soucook, and Turkey Rivers, these corridors (including their respective watersheds) provide unique habitats for many different mammals, birds, and plants. The majority of the Merrimack corridor north of Exit 15 on I-93 is wild and undeveloped, while the southern portion within Concord contains commercial and industrial buildings until the River reaches Bow

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Concord: 18, 37

The Acidic Riverside Seep Community that is found within the City is hosts the growth of a large variety of plants. Characterized by cobble and sand, these fen-like conditions are rare in New England. Mosses, round-leaved sundew, and bluets are a few of the plants which can be found.

The Dry Riverbluff Opening Community type is found along steep, sandy bluffs of the Merrimack and Soucook Rivers. The nutrient-poor soils support rare plants on the edges of primarily southern and western exposures, such as wild lupine and golden heather.

Several New England Pitch Pine/Scrub Oak Barrens exist in Concord. These habitats are home to many rare species of insects and plants. Some of these Barrens are seeing the pressures of development as they shrink in size and end up next to large developments. Fire is important in maintaining the structure, dynamics, and composition of the community. However, prescribed burns are no longer performed in Concord due to the areas' urbanized locality.

Broadly defined, Floodplain Forests are characterized by silver maples in regularly flooded alluvial terraces. The Merrimack River offers many opportunities for this community to take hold

The soils in the Lake Sediment/ River Terrace Forest tend to be deep, loamy, and fertile. These forests develop on river terraces and on lacustrine deposits. Wild ginger and scouring rush are frequently present.

Turtle Pond Conservation Area provides a unique habitat in the central eastern portion of the City. This area is largely undeveloped and old pine growths exist around the pond. The Pond is shallow and marshy in nature providing an excellent habit for birds and certain species of fish.

Turkey River, Marsh and Ponds Conservation Area is one of the largest mostly continuous conservation areas in the City. This area is well known for its large variety of bird and plant species. It also serves as a refuge for various small and medium mammalian species including: deer, porcupine, otter, beaver and many more.

Long Pond/Penacook Lake Conservation Area resides in the central portion of Concord, west of the Merrimack River. As the prime water source for the City of Concord and thus highly protected from pollution, this purest water body in Concord provides many animal species with a unique habit in the Central New Hampshire Region.

Identified Ecological Resource Priorities

City officials and volunteers have named the following ecological resources as being particularly important to Concord: ¹⁸

B Karner Blue Butterfly habitats

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the City of Concord. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Concord	Region	
First Priority	Greenway corridors	Scenic vistas	
Second Priority	Animal communities	Plant/tree communities (tied w/3rd)	
Third Priority	Riparian corridors	Animal communities (tied w/2nd)	
Fourth Priority	Scenic vistas	Riparian corridors	
Fifth Priority	Biological diversity and Natural Heritage Inventory Sites (tied)	Biological diversity	

A significant majority of the respondents felt that the City's ordinances and regulations did not adequately protect their ecological resources. ³¹

Specific comments 31

- B Develop adequate ways to sustain all ecological priorities.
- B Stabilize the population growth.
- B Better protection of scenic
- B Updating of ordinances and



vistas is needed.

regulations is required.

1 Geologic Resources

Surficial Geology

Steep slopes can be found throughout the City, primarily along the riverbanks of the Merrimack, Contoocook, and Soucook Rivers. These highly erodible slopes have, over time, altered the courses of these Rivers. Granite quarries and ledge also characterize a varied topography left by the recession of the last glacier. Flat alluvial floodplains, several prominent hills, and rich sand and gravel resources conclude the primary surficial features. ^{8, 14}

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Oak Hill	920'
Pine Hill	793'
Rattlesnake Hill	774'

Jerry Hill	728'
Horse Hill	720'
Parsonage Hill	720'
Rum Hill	520'
Silver Hill	441'
Dagody Hill	

<u>Bedrock Geology</u>

Areas that are shallow to bedrock are scattered throughout the City. This limitation prevents development where city water and sewer lines are unavailable. ^{8, 14, 18}

Identified Geological Resource Priorities

City officials and volunteers have named the following geologic resources as being particularly important to Concord: ¹⁸

- 1 Broken Ground area
- 1 Rattlesnake Hill quarries

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the City of Concord. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Concord	Region	
First Priority	Mountains and hills	Mountains and hills	
Second Priority	Bluffs	Soils identification	
Third Priority	Soils identification	Sand and gravel deposits	
Fourth Priority	Eskers, kames and drumlins	Bluffs	
Fifth Priority	Mining sites	Gorges	

The majority of respondents felt that the City's ordinances and regulations did not adequately protect their geologic resources. ³¹

Specific comments 31

- Need to develop necessary protections for geologic resources.
- 1 Control the development of uplands.

- 1 Protect Rattlesnake Hill including its public access.
- 1 Discover uses for abandoned sand & gravel pits.
- 1 Protection of quarries is needed.

X Recreational Resources

A variety of recreational opportunities and resources exist in Concord that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: $^{18, 29, 30}$

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage/ Miles
Fletcher-Murphey Play Lot	public		2 acres
West Street Play Lot	public		1 acres
Doyen Play Lot	public		1 acres
Thompson Play Lot	public		1 acres
Hall Street Playground	public		2 acres
Heights Playground	public	south side of Loudon Road, near Dame School	10 acres
Kimball Playground	public	near junction of North Spring and Rumford Streets with Pleasant Street	5 acres
Garrison Park	public		11 acres
Merrill Park	public		13 acres
Rolfe Park	public	Penacook	36 acres
Rollins Park	public	bounded by: Stone, Bow, Broadway, and Broad Streets	23 acres
Deer Park	public		3 acres
White Park	public	Bound by: Centre, High, Pine, White, Charles, and Franklin Streets	20 acres
Memorial Field	public	Fruit Street	12 acres
Everett Sports Arena	public	near Loudon Road. Bridge over Merrimack River (fee)	
Beaver Meadow Golf Course	public	SW of Sewalls Falls Bridge on Beaver Meadow Road (fee)	
Concord Country Club	private	Mountain Road	
Sewalls Falls Recreation Area	public	near Sewalls Falls Bridge	
Old Turnpike Road Rec. Area	public	Old Turnpike Road near Manchester Street	
Boat Launches	public	near Everett Arena near NH Technical Institute	

		at Sewalls Falls Recreation Area		
Skate Board Park	public	at Everett Arena on Loudon Road		
White Farm trails	public	Clinton Street		
Capitol Center for The Arts	private	Main Street (fee)		
Christa McAuliffe Planetarium	public	near NHTI on Fort Eddy Road (fee)		
Contoocook River Park	public	Route 3 in Penacook		
Contoocook River Park Trails	public	Electric Avenue in Penacook	2 miles	
Contoocook River Trails	public	Runnells Road in Penacook	2 miles	
O'Reilly-Fleetham Trails	public	River Road in Penacook	1 mile	
Rolfe Park Trails	public	Penacook Street in Penacook		
Sunny Crest Farm Trail	public	Carter Hill Road	2 miles	
Weir Road Trails	public	Weir Road		
Morono Park Trails	public	near Beaver Meadow School	2 miles	
Sewalls Falls Trails	public	Sewalls Falls Road	3 miles	
Curtisville-Stevens Trails	public	Batchelder Mill Road		
Society for the Protection of NH Forest Trails (SPNHF)	public	Portsmouth Street		
Hoit Marsh Trail	public	Hoit Road	1 mile	
Snaptown Road Trail	public	Hoit Road on the western side	1 mile	
Curtisville Road Trail	public	South Curtisville Road	1 mile	
East Sugar Ball Road Trail	public	between Eastside Drive and Portsmouth Street		
Heritage Trail	public	many access points within Concord	30 miles	
Turkey River & White Farm Trails	public	From Memorial Field on Fruit Street and White Farm on Clinton Street		
Upton-Morgan State Forest Trails	public	Silk Farm Road	1 mile	
Oak Hill Trails	public	Oak Hill Road		
Merrill Park Trails	public	Eastman Street	1 mile	

Identified Recreational Resource Priorities

City officials and volunteers have named the following recreational resources as being particularly important to the City: ¹⁸

★ Beaver Meadow Golf Course

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the City of Concord. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Concord	Region	
First Priority	Recreation trails	Recreational trails	
Second Priority	Beach access	Canoe/boat access	
Third Priority	Picnic areas and playgrounds	Outdoor sporting fields	
Fourth Priority	Canoe/boat access	Picnic areas & playgrounds	
Fifth Priority	Outdoor sporting onds	Beach access	

Specific comments 31

- **X** More multi-use trails and facilities are needed.
- **X** Better vandalism control is needed.
- X Improved public access is needed.
- ★Greaterpublic interestneeds to befostered.

Other Identified Resource Priorities

No other specific resources were identified.

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural, historical and recreational resources, Concord has established two different Commissions.

Conservation Commission

Concord's very active Conservation Commission has purchased conservation lands and arranged many conservation easements. The Commission is actively looking for more land to add to their large accumulation of valuable conservation land, many of which parcels then have recreational trails constructed upon them. The Commission's goal is to protect these lands from development while allowing public use and the management of forestry.

Heritage Commission

Heritage Commissions differ from Historic District Commissions in that the Heritage Commissions have the advisory and authority capacity to document and uphold the basis for protection of historic or cultural resources. With their diligent work and with cooperation from other non-profit groups operating within Concord, the number of Concord sites appearing on the National Register of Historic Places is within itself an impressive accomplishment.

In addition, numerous state agencies and non-profit conservation groups reside within the City. *ADDITIONAL SURVEY FINDINGS*

The following results have been also compiled from Concord's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- developing a conservation easement program
- ✓ reviewing wetland applications
- ✓ working on trails and trail maps
- ✓ hiring students to do conservation studies
- ✓ sponsoring conservation programs
- ☑ purchasing conservation land and easements
- ☑ trail clearing, blazing, signing, and maintenance
- ☑ Easement management

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- continuation of current projects
- expanding the track system and improve track accessibility
- study and delineation of prime wetlands

Essential Factors to Concord's "Quality of Life"

- M protected open space available for broad public use
- M bold city planning for the beautification of Greater Concord
- M regulated growth
- M quality schools
- M availability of recreational opportunities
- M preservation of open space and greenways
- M Concord's neighborhoods and extensive parks and recreation system
- M zoning and prudent planning
- M the diversity of leisure

and recreational pursuits -- available at low cost to citizens

M clean water and clean air

M appropriate disposal of waste

M water supply and pollution control

M access to and protection of water bodies

M arts program support

M National Register nominations

M flood plain zoning revisions

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Concord Zoning Ordinance, 1994
- 7 Concord City Officials/Employees, 1998
- 8 Concord Master Plan Year 2010 Updates, 1993
- 9 Various Concord Reports in CNHRPC Offices, 1998
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 NH Fish and Game: Inventory of Merrimack County Lakes and Ponds, 1968
- 14 CNHRPC: River Corridor & Open Space Study, 1972
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Concord Conservation Commission: Soucook River Watershed Study, 1980
- 31 Concord Survey Results, 1998

- 32 Concord Conservation Commission: Brooks, 1990
- 33 Turkey River Trust: Turkey River Basin Plan, 1993
- 34 Concord Cons Comm: Endowment for the 21st Century Conservation & Open Space Plan, 1993
- 35 Merrimack River Initiative: Map Series 1996
- 36 Concord Conservation Commission: A Wetland Index, 1982
- 37 NH DRED: A Classification of the Natural Communities in NH (Sperduto), 1994

DEERING

Γ,	Ahout Deering	
	Member of CNHRPC	✓
	Surveys Mailed	9
	Surveys Received for Tallying	3
	REPP Meeting Participation	✓
	Profile Review & Comment by	✓

Historical Profile

In 1765, Deering saw the arrival of its first non-native settler. At that time, the NH colonists called the area "Society Land" or "Cumberland." The early settlement of the region was slow, and a few years later only two new homesteads had been built. In 1773, a petition was presented to Governor Wentworth to charter the region, and on January 17, 1774 the charter was granted. Once the Town was incorporated, development continued at a faster pace, and by 1820 Deering had reached a population of 1,415. That population is the highest Deering would reach until the 1980's when the entire state saw a large population explosion. Lumbering and farming served as the Town's earliest and most prominent industries. A few saw, flour and clothing mills were built in the Town during the 1800's, but manufacturing was never a major contributor to the Town's overall economy. Today, the majority of Deering's residents travel to other communities to work, as Deering is still mostly a rural and agricultural town. ¹

Present-Day Profile

The area of Deering is 20,288 acres, or 31.7 square miles. The Town comprises 3.9% of the CNHRPC area. ²

Over the last twenty-seven years, Deering's population has grown by 206% while the number of housing units has increased by 116%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	<u>Net</u> #	Change %	
1970 (US Census)	578	na	na	371	na	na	
1980 (US Census)	1041	+463	+80.1	461	+90	+24.2	
1990 (US Census)	1707	+666	+64.0	757	+296	+79.8	
1997 Population & 1996 Housing (NHOSP)	1766	+59	+3.5	801	+44	+5.8	
TOTAL CHANGE FROM 1970 - 1997		+1188	+205.5%		+430	+115.9%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts Town-Adopted Resource & Conservation Ordinances

TOWN ZORING DISTITUTE	10 Wil Hubbled Resource & Conservation of dimences	
Residential/Agricultural	Shoreland Protection Ordinance	
Historic	National Floodplain Development Ordinance	
Aquifer	Aquifer Protection Ordinance	
Wetland	Cluster Development Provisions (in Zoning Ordinance and Subdivision Regulations)	
Shoreland (overlay)	Wetland Regulations (in Subdivision Regulations)	
Flood Plain	Excavation Regulation Provisions (in Wetland Regulations and Aquifer Ordinances)	
	Historic District Ordinance -draft	
	Telecommunications Facility Ordinance -pending	

Non-regulatory measures for protecting Deering's resources include the following: ^{7, 8, 9}

Town Master Plan Elements Special Conservation Plans, Reports and Studies

Goals & Objectives (1982)	Road Side Clean-ups (1980-present)
The Land (1982)	Lay Lakes Monitoring (1987)
Population (1982)	Wood Duck Restoration Program (1987-present)
Town Services (1982)	Water Resources Management and Protection Plan (1990)
Summary (1982)	Stream and Surface Water Testing (1993-present)

TOWN RESOURCES



Water Resources

Water Supplies

The Town of Deering has no piped water supply system. Instead, wells provide all the water for the Town's residents. The Deering Reservoir, located in the center of Deering, is the largest water body and is used for flood control purposes.

Between 1983 and 1997, the NHDES has issued 48 well permits to residents of Deering. The majority of them occur on Reservoir Road (6), Route 149 (6), and East Deering Road (10). Seven public water supplies are located within the Town at Long Wood's Mobile Home Park (2), His Mansion (3), Johnson City Mobile (1), and at Cliffton's Country Camping (1). These new well locations have been mapped by NHDES. ¹⁰

Lakes and Ponds ^{11, 12, 13, 14, 30, 33}

Lakes

The Deering Reservoir, although not the Town's water supply, is the largest water body in Deering. This lake is located in central Deering and is 315 acres in area with a maximum sounded depth of 35 feet and a mean depth of approximately 13 feet.

Permanent Ponds

Dudley Pond is located in northeast Deering. This pond is 30 acres in area and has a maximum sounded depth of 16 feet and a mean depth of about 5 feet.

Lily Pond is located in the southeast, and has a surface area of about 15 acres.

Clifton's Camp Pond is located in the west, and has a surface area of about 8 acres.

Mud Pond is located in the northeast, and has a surface area of about 8 acres.

Fulton Pond is located in south-central Deering, and has a surface area of about 5 acres.

Oxbow Campground Pond is located in the north, and has a surface area of about 5 acres.

Frog Pond is located in the northwest and is about 1 acre in size.

Beaver Ponds

Due to the dynamic nature of these waterbodies, this listing represents estimated observed areas from 11/11/98 and have been given local names.

Hunter's Pond is located in the southeast, and is about 25 acres in size.

Central Rangeway Pond is located in central Deering, and is about 20 acres in size.

Black Fox Pond is located in north-central Deering, and is about 36 acres in size. Johnson's Pond is located in the northeast, and is about 20 acres in size.

Rivers 11, 12, 13, 14

The Piscataquog River originates at the southern tip of the Deering Reservoir in south central Deering. From there the river travels south a short distance and then turns north-easterly and travels into Weare.

The Contoocook River marks Deering's western border between Deering and Antrim and is the largest River in the immediate area. The areas surrounding it are mostly rural, making it a well preserved strip of land. The Town's most productive stratified drift aquifer and many marshes accompany the River along Deering's western border. The Contoocook is also part of the NH Rivers Management and Protection Program.

The Smith Brook is a small river located in the northeast corner of the Town. This pristine brook flows through the Deering Wildlife Sanctuary.

Brooks 11, 12, 13, 14

Patten Brook enters into Deering's northeast corner from Henniker near Dudley Pond. South of Dudley Pond, Patten Brook travels a short distance and joins Dudley Brook.

Dudley Brook flows about 2.5 miles from Dudley Pond in the northeast corner of Deering to the Lake Horace area in Weare.

Hydric Soils 14, 30

Out of the total land acreage of Deering (20,288), 11% is comprised of hydric soils.

Deering is underlain primarily by four soils groups representing a wide variety of soil conditions, from poorly to well-drained, and sandy to fine-grained tills.

Colton-Adams-Naumberg

Marlow-Peru

Monadnock-Lyme

Monadnock-Lyme-Turnbridge

Watersheds

The Town of Deering resides approximately 20% within the Upper Contoocook Watershed, 20% within the Henniker Tributaries Watershed, 10% within the South Branch Piscataquog Watershed and 50% within the Upper Piscataquog Watershed. ¹⁰

<u>Aquifers</u>

The largest stratified drift aquifer resides below the western edge of Deering along the Contoocook River. This aquifer runs the length of the Town from north to south. Other stratified drift deposits can be found in the east central part of the Town. Smaller aquifers exist in the northeast corner and in the southeast corner. ¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large wetland areas exist in the western portion of Deering along the Contoocook River. Several more may be found near Deering Reservoir and in the northeast and southeast corners of Town. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- + Central Rangeway Ponds & Streams
- → Black Fox Pond
- **→** Smith Brook Waterways
- + Piscataguog Watershed including Brooks & Ponds & Marshes
- → Deering Reservoir
- **→** Perennial Streams
- → Contoocook River
- → Beaver Bogs
- → Aquifers

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Deering. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Deering	Region
First Priority	Aquifers	Rivers and streams
Second Priority	Designated Prime Wetlands (tied w/3rd)	Aquifers
Third Priority	Lakes and Ponds (tied w/2nd)	Lakes and ponds
Fourth Priority	Shorelands (tied w/5th & 6th)	Designated prime wetlands
Fifth Priority	Watersheds (tied w/4th & 6th)	Watersheds
	Rivers and Streams (tied w/4th & 5th)	

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their water resources. ³¹

Specific comments included: 31

- + More enforcement of shoreland, aquifer & wetlands ordinances is needed
- → Dudley Brook should be carefully protected
- + Ordinances needed to regulate locations of particular businesses
- → All water resources are very important
- + Local lake association is proactive on lake monitoring



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 85% of the entire Town. The following table breaks down the components: 8, 20, 21, 22, 32

CONSERVATION LANDS & CURRENT USE	Held By	Acres
Audubon Society Land	ASNH	135
Cope #3 easement	SPNHF	132
Cope #2 easement	SPNHF	14
Deering Reservoir	NH Water Res Council	5
Deering Wildlife Sanctuary	ASNH	485
French Conservation Area # 2	SPNHF	246
Garland easement	Town	6
Hillsboro Branch - B&M Railroad	Town	30
Hodgden Pastures	SPNHF	143
Jarvis easement	Town	33
Ruth Jarvis easement	Town	6
John & Anna King Forest	SPNHF	311
Lake Deering	NH Water Res Council	1
Leghorn easement (Dudley Brook)	Town	40
Levesque/Kilbride easement	ASNH	12
Lindquist (LCIP) easement	Town	13

North Road Wetland	Town	2
Paynter easement	Town	91
R.B. Roy easement	Town	14
Richard L Leghorn (LCIP) easement	Town	40
Sanctuary Island	PWA	6
Shepard's Crossing easement	Town	50
Sleeper/Gregg Lot	Town	18
Sunderland easement	Town	3
Thompson easement	SPNHF	120
Titcomb easement	Town	90
Vincent State Forest	NH DRED	239
Yeaple	SPNHF	77
Young easement	ASNH	21
Current Use		14,895
TOTAL ACREAGE PROTECTED		17278

In 1998, Deering voted to allocate a 50% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 Central Rangeway Road
- 2 Gregg Hill Road
- 2 Lands bounded by: Tubbs Hill, Clement Hill, and Dickey Roads
- 2 Lookout on North Road
- 2 Dutton Farm
- 2 Monitored tree cutting permits

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Deering. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Deering	Region
First Priority	Conservation easements	Open space
Second Priority	Deeded conservation lands	Agricultural land
Third Priority	Open spaces (tied)	Conservation easements
Fourth Priority	Agricultural lands (tied)	Town parks and forests
Fifth Priority	State parks & forests	Deeded conservation lands

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their land and forestry resources. ³¹

Specific comments 31

- 2 Create more Current Use-friendly ordinances
- 2 Zoning should be updated to



differential zones



Historical and Cultural Resources

National Register of Historic Places

Deering currently has no historic locations listed on the National Register. A large effort is required on the part of individuals to promote places of historic importance through applications to the National Historic Register. ^{1, 24}

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations where structures once stood or a historical event took place. Currently Deering has no historical markers listed with the New Hampshire Division of Historical Resources. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: ^{1, 8, 18}

- Built in 1788, Deering's original Town Hall has stood the test of time and is still used today. This white frame building has served as a meeting house and a school in times past.
- Reuben Loveren built the Deering Community Church in 1829, Deering's first church. This building is located opposite the Town Hall in Deering Center and was a Congregational church, but also served as a church for other religious practices.

- Reuben Loveren also built the East Deering Church in 1830. It was privately purchased in 1965 and given to the Deering Historical Society.
- Wilkin's School, believed to be the Town's first school, was built in 1806.
- Some aboriginal markings are found carved in granite on Hedgehog Hill. These markings are believed to be Native American in origin, but have not been statistically proven or dated yet.
- The Ebenezer Locke Home was built in 1780 on Driscoll Road opposite Goodale Cemetery. Local legend claims that Ebenezer fired the first shot of the Revolutionary War.
- A plaque resides on the summit of Wolf Hill, also known as Clark Summit. It was so named in memory of Clark Poling, one of the first chaplains of World War II fame.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Deering has not been a home to any recorded covered bridges, they still played a vital role in transportation in the area.²⁶

Archaeological Resources 30

There has never been a systematic archaeological survey of Deering. Historic sites, in the form of churches, Federal houses, school houses, cellar holes, dams and mills are known and recorded in the Town history, but they have never been the object of systematic archaeological investigation. Of recent note, bottle hunters have been active in Deering's cellar holes; unfortunately none of these sites are recorded in the files of the Archeological Division of the NH Department of Cultural Resources.

There is every reason to believe that prehistoric sites also exist. The State has been inhabited for approximately the past 10,000 years. Prehistoric site locations through New Hampshire reflect the settlement and subsistence pattern of the native hunting and gathering population. Sites are located along major rivers or lakes, near falls and rapids, and are associated with environmental features such as ledges, erratics, springs, streams, ponds, and wetlands. These locations reflect utilization of a diverse resource base. All of these features are present in Deering. Abenaki Indians are known to have been in the area during the Contact Period.

West Deering borders the Contoocook River where, just to the south, a multi-component site on the Tenny Farm has been recorded. On Hedgehog Hill, Indian petroglyphs were once reported and are described in the State files, but there is some doubt about their authenticity. Perley Adams, who "discovered" them in 1948, reportedly told a friend that he had actually done some of the carvings himself as a boy.

The New Hampshire Archaeological Society's "Old Indian Trails" map shows a branch of the "Pisgategwok" trail roughly following Route 149 to the Old County Road, and thence past the south end of the Deering Reservoir and the wetlands along the Piscataquog River into Weare. Clearly the potential for archaeological sites is high.

Cemeteries

As do many other small Central NH Region towns, Deering has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18, 30}

CEMETERIES	Owner	Parcel Number / Location
Goodale Cemetery	Town	Map 4, Lot 797 - Driscoll Farm Road
Appleton Cemetery	Town	Map 11, Lot 815 - Deering Center Road
Gove Cemetery	Town	Map 8, Lot 379 - land of His Mansion
West Deering Cemetery	Town	Map 6, Lot 799 - Airport Road
Patten Cemetery	Town	Map 7, Lot 812 - land of Audubon Society
Wilkins Cemetery	Town	Map 5, Lot 798 - Old County Road
East Deering Cemetery	Town	Map 4, Lot 809 - East Deering Road
Butler Cemetery	private	Deering Center Road
Bartlett Family Cemetery	private	intersection East Deering Rd/Dudley Brook Rd
Wolf Family Cemetery	private	East Deering Road
Poling Family Cemetery	private	land of His Mansion

The only cemeteries that have space available for burial are the Butler, East Deering, and Wilkins Cemeteries. The rear portion of the East Deering Cemetery was expanded and the new addition has been called the Yeaple Annex. The west and south portions of Wilkins Cemetery contain almost a 30' strip that was cleared and is now available for mapping; presently mapped portions have already been sold. With lots in East Deering and Wilkins, it is estimated that space for future burials will not be a problem for at least 10 or more years. As Butler Cemetery is privately owned, it is not clear as to what will happen to the portion toward the rear that could be developed for future use.

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- Cellar holes
- Barn foundation & walls on the south side of Tubbs Hill
- East Deering Church
- Dam sites along Dudley Brook

- Stage Coach Hotel on 2nd New Hampshire Turnpike
- Conference Center as Deering Reservoir
- Town Center Area
- His Mansion cemetery
- Stone bridge on Piscataquog
- Barn foundations in general
- Town pound on Fisher Road

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Deering. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Deering	Region
First Priority	Cemeteries	Cemeteries
Second Priority	Unique cellar holes	Cultural interest sites
Third Priority	Archaeological sites (tied w/4th)	Covered bridges
Fourth Priority	Cultural interest sites (tied w/3rd)	National Register of Historic Places
Fifth Priority	Covered bridges	Archaeological sites

All of respondents felt that the Town's ordinances and regulations do not adequately protect their historical and cultural resources. ³¹

Specific comments 31

- Need historic district ordinances
- Town center is of particular



importance

B Ecological Resources

NH Natural Heritage Inventory

At this time, the New Hampshire Natural Heritage Inventory has no records for the Town of Deering. ²⁷

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of animals, particularly larger mammals, within an area. The following corridors have been identified in Deering: ^{15, 18 19, 30}

Due to the relatively undeveloped nature of Deering, wildlife is able to move freely through the Town. There are three primarily riparian corridors within Deering that link over 75% of all wetland soils.

The first large riparian corridor follows the Contoocook River south to north on the Town's western boundary. The Gerinni and Manselville Brooks are the primary tributaries. The Town's largest continuous wetland is associated with the Manselville Brook in the northwest corner of Town and together with the other wetlands in this area represent about 25% of the Town's total wetlands. The river's undeveloped banks and the close association with the Town's highest concentration of farms and non-forested habitat offer many animals a resource-rich habitat.

The second large riparian corridor follows the Piscataquog River south and to the east from the Deering Lake (Deering Reservoir). There are several medium and smaller wetlands that dot the entire length of the River and also represent about 25% of Deering's wetlands.

The third riparian corridor originates in north-central Deering with the Smith Brook. This flow runs east and then north and is joined by the Patten Brook in the northeast corner of Town. Patten Brook in turn flows southeast into Dudley Brook. Dudley Brook flows south along the Town's eastern boundary where it eventually joins the Piscataquog in Weare. Associated with Smith Brook is one large wetland and along the entire length of this corridor are several medium and smaller wetlands that collectively represent about 25% of Deering wetlands.

The principal mountain ridge corridor exists in West Deering along Hedgehog Mountain and Wilson Hill. This is a north-south steep ridge that divides the Contoocook River watersheds from the Piscataquog River watersheds. The steepness and undeveloped nature of this feature provides seclusion for the variety of wildlife and easy access to all parts of Deering.

A large utility line corridor cuts through Deering from the southeast corner to the northwest corner. This corridor offers a long, undisturbed path for wildlife to use when traveling between habitats. Also the unique nature of the habitat created by the utility lines offers a new place for many plants and animals to live.

A railroad corridor exists along Deering's western border and runs parallel to the Contoocook River. Railroad corridors, like utility corridors, offer wildlife a long, uninterrupted corridor to

travel along. This rail corridor is no longer in use and has been turned into a public trail owned by the State of New Hampshire.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Boscawen: ¹⁸

Currently, Deering enjoys a variety of exemplary natural communities that have not been significantly disturbed. Two areas are worthy of special recognition because of large properties protected by conservation easements.

The first general area centers around Falls Road in southeast Deering. This includes the King Forest to the south, the Hodgden Pasture to the north and the French easement to the east. There is a large block of land with an impressive mix of natural features including pond, stream, wetlands, meadows, and forests. Present is one of the Town's two heron rookeries and this area consistently is home for the highest concentration of seasonal and migratory waterfowl.

The second general area is centered along Clement Hill Road in north-central Deering. This would include the Deering Wildlife Sanctuary to the south, the lead mine and Mud Pond wetlands to the north, and Dudley Pond and Vincent State Forest area to the east. This large block of land also has a rich mixture of natural features that are home to impressive collections of diverse wildlife and the Town's second heron rookerie.

Scenic Roads and Vistas 14, 30

Ten scenic roads have been identified in Deering:

Class V Roads

Bartlett Hill Road
Glenn Road
Old Henniker Road
Wolf Hill Road (portion)
Fisher Road
Old County Lane
Pleasant Pond Road

Class VI Roads

Wolf Hill Road (portion) Old Francestown Road Clement Hill Road

A scenic lookout is protected by a conservation easement off of Deering Center Road at the intersection with Old County Road.

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: 18

- B Turkey population
- B Deer yards
- B Investigation of endangered and rare species

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Deering. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Deering	Region
First Priority	Bio-diversity	Scenic vistas
Second Priority	Animal communities	Plant/tree communities (tied w/3rd)
Third Priority	Greenway corridors	Greenway corridors (tied w/2nd)
Fourth Priority	NH Inventory Sites	Riparian corridors
Fifth Priority	Plant/tree communities	Biological diversity

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

B Need to update ordinances and

B The Conservation resource protection issues



regulations to address ecological resources Commission is actively exploring ecological

Geologic Resources

Surficial Geology

Floodplain alluvium underlies the Contoocook River, and kames and kame terraces lie in the lands along the river's eastern banks. Isolated organic deposits are scattered throughout the Town, and stratified drift outwash plains underlie a patch of land in the Town's eastern side (southeast of East Deering Road). ^{12, 14}

Additional and perhaps more recognizable geologic formations are mountains and hills: 14, 28

MOUNTAINS AND HILLS	Elevation
Bartlett Hill	1120'
Clark Summit (Wolf Hill)	1520'
Gove Hill	883'
Goodale Hill	1160'
Gregg Hill	1320'
Hedgehog Hill	1340'
Locke Hill	1000'
Sodom Hill	1150"
Wilson Hill	1400'

Bedrock Geology

About ½ of Deering's bedrock is composed of the Littleton Formation of Undifferentiated Schists and Gneisses. The Contoocook River is underlain by the Antrim Pluton comprised of Granodiorite-Biotite Granodiorite Biotite Quartz Monzonite. A formation of similar composition (Hungry Moose Pluton) begins in the southeast corner of the Town and extends west to Deering Lake and north to just below Vincent State Forest. 12

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 Hedgehog Hill
- 1 Sand deposits on Robinson/Warner Lands
- 1 Lead mines on Clement Hill
- 1 Wolf Hill
- 1 Eisenglass mine

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Deering. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Deering	Region
First Priority	Eskers	Mountains and hills
Second Priority	Mountains & hills	Soils identification
Third Priority	Gorges	Sand and gravel deposits
Fourth Priority	Sand & gravel deposits (tied w/5th)	Bluffs
Fifth Priority	Caves (tied w/4th)	Gorges

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their geologic resources. ³¹

Specific comments 31

1 Need to study existing sand



& gravel deposits and their recovery processes

X Recreational Resources

A variety of recreational opportunities and resources exist in Deering that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Clarke Summit Trails	public	Between Wolf Hill Road and Old Country Road	2 miles
Deering Reservoir	public	Reservoir Road	314 acres
Deering Reservoir swimming area	public	Reservoir Road	2 acres
Deering Wildlife habitat reserve	private	Clement Hill Road	506 acres
Deering Lake boat launch	public	Deering Lake	1 acre
Dudley Pond boat launch	public	Dudley Pond - North East Deering	1 acre
Hawthorne Feather Airpark	private	off 2nd NH Turnpike	
Old B&M RR trail	public	West Deering	6 miles
Oxbow Campground	private	East off Deering Center Road, just south of the Hillsborough town line	175 acres

Horsemanship	private	Old County Road and North Road	
Falls Road natural area	private	off Old Country Road, includes King Forest, Hodgden Pastures, and French Conservation Area	225 acres
Vincent State Forest	public	North East Deering - shared with Weare	217 acres

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: 18

- X Clarke Summit Trails
- **★** Conference Center (Deering Lake property)
- **X** Deering Reservoir
- Deering Reservoir boat launch & swimming area
- Old Boston and Maine railroad bed trails

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Deering. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Deering	Region
First Priority	Recreational trails	Recreational trails
Second Priority	Beach access	Canoe/boat access
Third Priority	Canoe & boat access	Outdoor sporting fields
Fourth Priority	Picnic areas & playgrounds	Picnic areas and playgrounds
Fifth Priority	Outdoor sporting fields	Beach access

Specific comments 31

X At current population levels,



public facilities are not major issues.

16

Other Identified Resource Priorities

Town officials and volunteers did not name any other resources of major importance to the Town ¹⁸

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Deering has established a Conservation Commission, an Historic District Commission, and the Deering Historical Society. Private organizations, such as the Deering Association, Deering Lake Association and the Friends of Deering, are also active in protecting the Town's natural and cultural heritage. ³⁰

Conservation Commission

Recent activities of the Conservation Commission include: the development of a conservation easement report; the development and initiation of a Wood Duck revitalization program which involved rehabilitating all of the Wood Duck boxes located in Deering's waterways; the organization and support of a volunteer based roadside clean-up project; surface water testing; the Lay lakes monitoring project; the redesign and rehabilitation of a picnic area and boat launch on Deering Reservoir; and the ongoing search for new conservation easements.⁸

Historic District Commission

This commission works with the Conservation Commission, the Planning Board, and the Historical Society to protect Deering's Historic District.

Historical Society

A private Historical Society also exists to help protect Deering's heritage. The group works to identify and preserve Deering's historical resources through research and public education. One of the society's significant recent projects was the restoration of the East Deering Church.

ADDITIONAL SURVEY FINDINGS

The following results have also been compiled from Deering's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ✓ conservation easements
- \square land protection and water testing
- ✓ roadside Clean-up
- ✓ education
- work on the Town's public beach and boat access area
- wood duck restoration

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- land protection
- more education to voters in regard to conservation committee issues
- Town forest
- updating the Town Master Plan
- wildlife baseline including rare and endangered species

Essential Factors to Deering's "Quality of Life"

- M rural character and natural setting
- M protection of unique resources
- M recreation trails
- M local (non-government) organizations which try to provide a mix of activities and community focus (including churches, historical society, local newsletter, etc.)
- M active participation of many young people

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Deering Zoning Ordinance, 1998
- 7 Town Officials/Employees, 1998
- 8 Deering Town Annual Report, 1997
- 9 Deering Subdivision Regulations, 1989
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Deering Town Plan, 1982
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 Deering Conservation Commission and its citizen contributors
- 31 Deering Survey Results, 1998
- 32 Deering Conservation Easement Report
- 33 Deering Wood Duck Program Report, 1997

DUNBARTON

<u>۾</u>	hout Dunharton	
	Member of CNHRPC	✓
	Surveys Mailed	15
	Surveys Received for Tallying	1
	REPP Meeting Participation	✓
	Profile Review & Comment by	×

Historical Profile

Dunbarton was first settled around 1740 and became known as Gorham Town. When Archibald Stark purchased and resided on the land, the Town became known as Starkstown. The Town was renamed Dunbarton in 1765 when Governor Wentworth granted a charter incorporating the Town. Most of Dunbarton's early settlers came from the areas around Londonderry and Derry, but many also came from England, Scotland, and Ireland. The earliest form of industry in Dunbarton was, by necessity, lumbering in order for the settlers to build houses and have farms to grow their food. While lumbering remained a steady industry in Dunbarton for many years, the main industry became agriculture. In more recent times, Dunbarton has successfully managed to keep its rural character, although working farms are rare. An active Historical Society has helped preserve many historical landmarks and works to keep Dunbarton's history alive.¹

Present-Day Profile

The area of Dunbarton is 20,416 acres, or 31.9 square miles. The Town comprises 4.0% of the CNHRPC area. ²

Over the last twenty-seven years, Dunbarton's population has grown by 143% while the number of housing units has increased by 125%: ^{3, 4, 5}

GROWTH	Population	<u>Net Cl</u> #	hange %	Housing Units	<u>Net C</u> #	<u>Change</u> %	
1970 (US Census)	825	na	na	354	na	na	
1980 (US Census)	1174	+349	+42.3	431	+77	+21.8	
1990 (US Census)	1759	+585	+49.8	685	+254	+58.9	
1997 Population & 1996 Housing (NHOSP)	2007	+248	+14.1	796	+111	+16.2	
TOTAL CHANGE FROM 1970 - 1997		+ 1182	+ 143.2		+ 442	+ 124.9	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts Town-Adopted Resource & Conservation Ordinances

Low Density Residential	Wetland Development Ordinances
Medium Density Residential	Cluster Development Ordinances
Village District	Excavation Regulations
Manufactured Housing	Sewage/Sludge Regulations
Wetland Conservation	

Non-regulatory measures for protecting Dunbarton's resources include the following: 7, 8, 14

Town Master Plan Elements Special Conservation Plans, Reports, and Studies

General Statement (1990)	Open Space Plan (1973)
Existing Land Use (1990)	
Housing, Population and Income (1990)	
Transportation (1990)	
Public / Municipal Facilities (1990)	
Recreation (1990)	
Conservation and Preservation (1990)	
Future Land Use (1990)	

TOWN RESOURCES



Water Resources

Water Supplies

The Town of Dunbarton has one public water supply, the Dunbarton Elementary School, which serves a population of up to 180 persons.

Between 1983 and 1997, the NHDES has issued 132 private well permits to residents of Dunbarton. The majority of them occur on Robert Rogers Road (16) and on Route 13 (13). Others roads which have several of these well sited on them are: Gorham Pond Road (8), Leg Ache Hill Road (6), Clifford Farms Road (7), and Black Brook Road (7). These new well locations have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13, 14

Gorham Pond is the main tributary to Gorham Brook. This 103-acre pond has a maximum sounded depth of 14 feet.

The 83-acre Stark Pond is also one of Dunbarton's larger ponds, yet its shallowness yields an average depth of only six feet.

Kimball Pond is 52 acres in area with an average depth of nine feet. This pond becomes a tributary to the Merrimack through the Black Brook.

Long Pond is a natural 32-acre pond and is a tributary to the Piscataquog River.

Purgatory Pond is a small 14-acre pond. The maximum depth sounded was 14 feet with an average depth of 10 feet.

There are no rivers located within the boundaries of Dunbarton. On the western side of Dunbarton, within the boundaries of Weare, lies the Piscataquog River. On the eastern side, within the boundaries of Hooksett, lies the Merrimack River. Many of the lakes and streams within Dunbarton empty into these two major rivers.

Brooks 11, 12, 13, 14

Harry Brook flows from Long Pond south into Goffstown.

Black Brook flows into Dunbarton from Bow and travels a few miles into Kimball Pond.

Gorham Brook flows from Gorham Pond in the Southwest area of Dunbarton over the border and into Goffstown where it makes its way to the Piscataquog River.

Stark Brook flows from the Stark Marsh area several miles into the Piscataquog River/Everett Lake area.

Bela Brook flows into Dunbarton's northeast corner from Bow. This brook continues several

miles into Dunbarton.

Purgatory Brook travels a short distance, from Purgatory Pond, into Goffstown.

Hydric Soils

Out of the total land acreage of Dunbarton (20,416), 14.4% of all soils are characterized as hydric: ^{6,32}

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1238	6.1
Very Poorly Drained - organic base	1354	6.6
Very Poorly Drained - mineral base	9	0
Marsh	349	1.7
TOTALS	2,950	14.4

Watersheds

Although not a containing a river within its own borders, Dunbarton nonetheless is situated in many sub-watersheds of the Piscataquog and Merrimack Rivers. The watersheds of the Concord, Henniker, and Manchester Tributaries of the Merrimack River cover the northern and eastern boundaries of the Town. The Upper and Lower Piscataquog watersheds cover the remaining southern and western portions of Dunbarton. ¹⁰

Aquifers

A fairly large aquifer resides beneath the Stark Pond, Stark Brook, and Stark Marsh area. This aquifer stretches from a few miles south of Hopkinton, travels along Stark Brook to Stark Marsh, then down to Stark Pond. After Stark Pond, the aquifer becomes less continuous with small segments periodically underlying the surface until Clough State Park. The other main aquifer in Dunbarton lies along the Kimball Pond/Black Brook watershed. This aquifer is concentrated around Kimball Pond with smaller portions north and south of the pond. A few additional small aquifers underlie the Town in the southeastern parts and southwestern parts.

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Services between 1986 and 1990 dot the entire Town. A large wetland resides in the Kimball Pond area, encompassing it and the entire surrounding area. A second large wetland begins north of Gorham Pond in the south western corner of Dunbarton. From north of the pond this wetland continues through the Gorham Pond drainage area and thins as it follows the Gorham Brook into Goffstown. Other large wetland areas include: Stark Marsh, portions along Stark Brook, areas of Purgatory Pond, and portions along Bela Brook. Many other small isolated wetlands exist throughout Dunbarton. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- → Gorham Pond
- ★ Kimball Pond
- → Marsh off of Route 13 including Stark Marsh
- → Bela Brook
- → Purgatory Pond
- + Long Pond
- → Black Brook
- * sand and gravel aquifer at Gorham and Stark Ponds
- → intermittent and perennial streams

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Dunbarton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Dunbarton	Region
First Priority	Shorelands	Rivers and streams
Second Priority	Rivers and streams	Aquifers
Third Priority	Other wetlands	Lakes and ponds
Fourth Priority	Lakes and ponds	Designated prime wetlands
Fifth Priority	Watersheds	Watersheds

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their water resources. ³¹

Specific comments included: 31

- → Stream and wetland set-backs are needed.
- + Building should be prohibited on floodplains.
- + Vernal pools and ponds are also of importance.
- + The only aguifer large enough as a water supply is located beneath the town dump.



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 67% of the entire Town. The following table breaks down the components: ^{7, 8, 14, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Brown (Gorham Pond) (LCIP)	Town	50
Clough State Park (small portion in Dunbarton)	NH DRED	1
Erikson Lot (South side of Everett Dam Road)	Town	122
Fogg (Gorham Pond) (LCIP)	Town	58
Fogg (Gorham Pond) (LCIP)	Town	14
Freeport Development (Gorham Pond) (LCIP)	Town	62
French #5 easement	Town	127
Grant easement & Grant Flowage easement	Town	8
Gravis (Gorham Pond) (LCIP)	Town	269
Great Meadow - Three Lots	Town	75
Greenhalge (Gorham Pond) (LCIP)	Town	22
Greenhalge easement	Town	50
Hopkinton-Everett Reservoir (portion in Dunbarton)	US Army Corps	1187
Hough Estate	SPNHF	130
Kimball Pond	Town	72
Kuncanowet Town Forest	Town	43
Kuncanowet Town Forest - Heino Lot	Town	34
Kuncanowet Town Forest - Holiday Shore Lot	Town	12
Kuncanowet Town Forest - Kimball Pond Road	Town	278
Kuncanowet Town Forest - Mansion Road	Town	12
Kuncanowet Town Forest - Parker/Stinson Lot	Town	259
Kuncanowet Town Forest - Town Forest & Cons Area	Town	123
Kuncanowet Town Forest - Winslow Lot #1	Town	107
Kuncanowet Town Forest - Winslow Lot #2	Town	41
Kuncanowet Town Forest - Upton Lot	Town	14
Long Pond Lot	Town	10
Gorham Pond Lot	Town	5
Ray Road Lot	Town	20

Richards easement (Kimball Pond)	Town	76
Story Easement	Town	53
Taylor easement	Town	145
Whitney #1 (Gorham Pond) (LCIP)	Town	190
Whitney #2 (Gorham Pond) (LCIP)	Town	2
Current Use		9977
TOTAL ACREAGE PROTECTED		13648

In 1998, Dunbarton supported a 50% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 Town Forests
- 2 open Farmland at Page's Corner
- 2 view of Mount Kearsarge from Dunbarton Hill
- 2 land around Long Pond
- 2 Route 13 ridge
- 2 Hopkinton and Everett flood control lands
- 2 power line corridors
- 2 large blocks of undeveloped land
- 2 prime agricultural lands
- 2 unique wildlife habitats and corridors

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Dunbarton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Dunbarton	Region
First Priority	Agricultural lands	Open spaces
Second Priority	Open spaces	Agricultural lands
Third Priority	Town parks & forests	Conservation easements

Fourth Priority	Deeded conservation lands (tie)	Town parks & forests
Fifth Priority	Conservation easements (tie)	Deeded conservation lands

The half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. 31

Specific comments 31

2 Recognition of the importance of habitats and resource-based enterprises is too low.



Historical and Cultural Resources

National Register of Historic Places

No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property. Dunbarton currently has no sites listed on the National Register of Historic Places.^{1, 24}

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

One of the most well-known historical sites in Dunbarton is the Molly Stark House. This house was built in 1759 by Captain Caleb Page and became home to Molly Page. Molly married John Stark, the illustrious General/Hero of the Revolutionary War, and lived with him in this house for many years. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 25

- The first Meeting House in Dunbarton was built in 1767, serving as both a meeting house and a church for twenty years.
- The second Meeting House, larger and more detailed than the first, was built in 1789.
- The first church built in Dunbarton served the Congregationalists. This church, which still stands today, was built in 1836.
- Stark's Mill was the first mill built in Dunbarton. The townspeople granted General John Stark 100 acres of land upon which to build a saw mill. In return, Stark was obliged to "sell to the town's people for as cheap as any neighboring mill".

The Town Pound, less than one acre in size, was erected around 1767 near the first Meeting House.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. The fact that no rivers run through Dunbarton is a likely reason why no covered bridges were built in the Town. ²⁶

Cemeteries

As do many other small Central Region towns, Dunbarton has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 14, 18}

CEMETERIES	Owner	Parcel Number / Location
Pages Corner Cemetery	Town	Page's Corner
Center Cemetery	Town	Center of Town
East Cemetery	Town	Bow town line
Stark Cemetery	private	Mansion Road

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: 18

- Molly Stark House at Page's Corner
- blacksmith shop at Page's Corner
- and old cellar holes
- Indian corn mill located off of Everett Dam Road
- Town Center
- scenic roads
- Stark Cemetery

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Dunbarton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Dunbarton	Region
First Priority	Cultural interest sites	Cemeteries
Second Priority	Archeological sites	Cultural interest sites

Third Priority	Unique cellar holes	Covered bridges
Fourth Priority	Unique stone walls	National Register of Historic Places
Fifth Priority	not given	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

B Ecological Resources

NH Natural Heritage Inventory

One outstanding animal species has been identified in Dunbarton since the 1930's through the NHI program. A Great Blue Heron rookery has existed in Dunbarton for many years. This beautiful large bird has only thirty-three listed nesting locations in the State although it is not formally listed as a threatened or endangered species. 18, 27

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of animals, particularly larger mammals, within an area. The following corridors have been identified in Dunbarton: ^{15, 18} ¹⁹

A large utility line corridor travels through the entire length of Dunbarton from the northern border with Hopkinton to the southern border with Goffstown. This corridor runs through several marshes, conservation lands, and other non-developed lands making it an excellent travel corridor for different vertebrates.

The riparian corridor of Bela Brook is primarily undisturbed by roadways or human activities. A series of wetlands dot the entire Brook as it travels almost the entire length of the Town from the eastern Bow border to the southern Goffstown border.

Perhaps the most significant corridor is found within the Black Brook watershed, a sub-watershed of the Manchester Tributaries of the Merrimack River watershed. This rich area encompasses Great Meadow, Kimball Pond and Black Brook and follows along the eastern edge of a contiguous block of conservation land.

Exemplary Natural Communities

A deeryard has been identified to exist within a dry, open space between Winslow and Barnard Roads. ¹⁸

Excellent habitat is found in a large open space adjacent to Chase Sanctuary in Hopkinton.

Scenic Roads and Vistas

A scenic vista is located from Mill's Hill, off Route 13, offering views of the countryside and of Mount Washington on a clear day. Other views include those from the Route 13 ridge and Grapevine Road. ¹⁴

The official designation of a scenic road has also been granted to Legache Hill Road, County Road, Line Hill Road, Stone Road, Guinea Road, Tenney Hill Road, and Gile Road, while the southern portion of Black Brook Road has been identified as particularly scenic. 14, 18

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Great Blue Heron rookery
- B Great Meadows
- B habitat around Bela Brook
- B Kimball Pond wildlife corridor
- B Gorham Pond wildlife corridor
- B Green Meadows deeryards
- B beaver dams east of Mansion Road
- B undeveloped corridor between Kuncanowet Town Forest & Everett Flood Control Area

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Dunbarton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Dunbarton	Region
First Priority	Riparian corridors	Scenic vistas
Second Priority	Bio-diversity	Plant/tree communities (tied w/3rd)
Third Priority	Greenway corridors	Animal communities (tied w/2nd)
Fourth Priority	Plant/tree communities	Riparian corridors
Fifth Priority	Animal communities	Biological diversity

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their ecological resources. ³¹

Specific comments 31

- B Large continuous blocks of land/water are critical for protection of wildlife corridors.
- B Old growth forests are very important.
- B More NHI field work is needed.
- B Addition training of planning board members regarding cluster development and siting for resource impacts should be conducted.

Geologic Resources

Along with a large glacial erratic found at junction of Clinton Street (Route 13) and the powerline corridor, the most recognizable geologic formations within Dunbarton are its mountain and hills: 14, 28

MOUNTAINS AND HILLS	Elevation
Quimby Mountain	1000'
Kuncanowet Hills	130'

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 esker in Everett Flood Control Area
- 1 glacial erratics along utility lines
- 1 eskers in Kuncanowet Town Forest

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Dunbarton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Dunbarton	Region
First Priority	Gorges	Mountains and hills
Second Priority	Bluffs	Soils identification
Third Priority	Mountains and hills	Sand and gravel deposits

Fourth Priority	Eskers	Bluffs
Fifth Priority	Sand and gravel deposits	Gorges

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources. ³¹

Specific comments 31

1 Additional zoning regulations are needed to keep roads and building off steep slopes.

X Recreational Resources

A variety of recreational opportunities and resources exist in Dunbarton that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: 14, 18, 29

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Kuncanowet Town Forest	public		900 acres
Boat access areas	public	Gorham, Kimball, Long, and Purgatory Ponds	1 acre each
Recreation trail from Kimball to Long Pond	public		
Recreational trails within Hop-Everett Reservoir	public	access from Route 13	20 miles
Mill Pond Trail	public	Kuncanowet	
Dunbarton Elementary School Playground	public		12 acres
Pioneer Sportsmen, Inc	private		12 acres
Gorham Pond boat access	public	Gorham Pond	1 acre
Kimball Pond boat access	public	Kimball Pond	1 acre
Long Pond boat access	public	Long Pond	1 acre
Purgatory Pond boat access	public	Purgatory Pond	1 acre
Lake Gorham Association boat access	private		1 acre
Clough State Park (small portion within town)	public		1 acre



Center School Sports Field	public	5 acres
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Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- X Clough State Park
- **X** Boat ramps on Gorham & Kimball Ponds
- **X** Recreation trail from Kimball to Long Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Dunbarton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community respondents in the CNHRPC Region: 31

RESOURCE PRIORITIES	Dunbarton	Region
First Priority	Recreational trails	Recreational trails
Second Priority	Outdoor sporting fields	Canoe/boat access
Third Priority	not given	Outdoor sporting fields
Fourth Priority	not given	Picnic areas & playgrounds
Fifth Priority	not given	Beach access

Specific comments 31

- **X** Need more trails for non-motorized recreational activities.
- **X** Hunting should be more restricted in public forests.

Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

- ✗ Volunteers and a volunteer Fire Department are very important
- **✗** Small population
- ★ Golf courses
- Scenic roads

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Dunbarton has established a Conservation Commission, an Historical Awareness Committee, a Town Forest Committee, and the Kuncanowet Town Forest and Conservation Area Committee.

Conservation Commission

Dunbarton's active Conservation Commission, with the extraordinary efforts of its volunteers, has acquired many important conservation lands; their latest large acquisition was a 122-acre lot off of Everett Dam Road that abuts the Town Forest. The Commission has won the support of the Town and saw an increase in its funding allocations in 1997. The Commission has also been active in wetland inspections and in the promotion of conservation easements.

Historical Awareness Committee

This valuable committee is charged with helping teach adults and children the history of Dunbarton. Four historical tours of Dunbarton have been created to help show and teach the community about Dunbarton's rich historical past. Some exciting information came to the attention of the Committee in 1997 when inventories of Dunbarton from 1761 and 1763 were discovered in archives. These inventories hold the names of residents and the locations of buildings, some long lost and until now, forgotten.

Town Forest Committee

The Town Forest Committee exists to help govern and maintain the Kuncanowet Town Forest. This Committee is key in managing the selective lumbering of the Forest.

Kuncanowet Town Forest and Conservation Area Committee

Comprised of members appointed by the Chairs of the Town Forest Committee and Conservation Commission, the Kuncanowet Committee works to keep the Forest and its trails well maintained for the public to enjoy.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Dunbarton's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ four or five resident field trips

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- public education on conservation issues
- continuation of resident field trips
- promotion of conservation easements

Essential Factors to Dunbarton's "Quality of Life"

- M small size
- M feeling of neighborliness
- M open space and public lands
- M responsive public officials

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Dunbarton Zoning Ordinance, 1990
- 7 Town Officials/Employees, 1998
- 8 Dunbarton Town Annual Report, 1997
- 9 (reserved)
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Dunbarton Master Plan, 1990
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 (reserved)
- 31 Dunbarton Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

EPSOM

-	hout Ensom	
	Member of CNHRPC	×
	Surveys Mailed	12
	Surveys Received for Tallying	2
	REPP Meeting Participation	×
	Profile Review & Comment by	×

Historical Profile

Epsom was incorporated in 1727 under the condition that its grantees settle the region immediately. The 1730's saw the beginnings of a true frontier town complete with log cabins, farms, and kidnappings by Native Americans. By 1765, a meeting house and a school house had been built. The Revolutionary War gave Epsom its fair share of war heros, and the 1800's brought industry to the Town in the form of grist and saw mills. During the mid 19th century, the Town laid new roads to facilitate transportation and communication. Epsom's growth, however, was neither rapid nor particularly steady. Industry remained light, mills shut down, and farmers found new lands to harvest in the Midwest. L.M. Bunker reported in 1927 that "Epsom of the past" was a more active place than "Epsom of the present." In a way, this is still true. While recent technological advances have brought the necessary modernities to the Town of Epsom, it remains a quiet, simple, and beautiful place to live. ¹

Present-Day Profile

The area of Epsom is 21,696 acres, or 33.9 square miles. The Town comprises 4.2 % of the CNHRPC area. ²

Over the last twenty-seven years, Epsom's population has grown by 163% while the number of housing units has increased by 197%: ^{3, 4, 5}

GROWTH	Population	Net (Change %	Housing Units	Net Cl #	nange %	
1970 (US Census)	1469	na	na	519	na	na	
1980 (US Census)	2743	+1274	+ 86.7	1074	+555	+ 106.9	
1990 (US Census)	3591	+848	+ 30.1	1396	+322	+ 30.0	
1996 Population & 1997 Housing (NHOSP)	3866	+275	+ 7.7	1542	+146	+ 10.5	
TOTAL CHANGE FROM 1970 - 1997		+ 2397	+ 163.2%		+ 1023	+ 197.1%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Residential/Agricultural	Excavation Regulations	
Residential/Commercial	Cluster Development Ordinance	
	Floodplain Development Ordinance	

Non-regulatory measures for protecting Epsom's resources include the following: ^{7, 8, 9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Objectives (1986)	
Housing (1986)	
Economic Conditions (1986)	
Land Use (1986)	
Natural Limitations (1986)	
Population and Trends (1986)	
Town Services and Facilities (1986)	

The Town will begin revising their Master Plan in early 1999.

TOWN RESOURCES



Water Resources

Water Supplies

Many public water supplies exist within Town, most of them directly associated with restaurants, campgrounds, or manufactured housing parks. Private wells serve the majority of the residential population. Between 1983 and 1997, the NHDES has issued 156 well permits to residents of Epsom. The majority of them occur on Route 4 (10), Route 28 (10), Chestnut Pond Road (11), Goboro Road (10), and North Pembroke Road (10). These new well locations have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13, 14

Seeley Pond is approximately three acres in area with an average depth of two feet.

Chestnut Pond is located in the northeast corner of Town, just south of the Pittsfield town line. It has an area of 30 acres and serves as a tributary to Little Bear Brook.

Odiorne Pond is a 20 acre pond surrounded by swamp land. It is located west of Chestnut Pond and south of the Pittsfield town line, and it serves as a tributary to Lockes Brook.

The Little Suncook River flows into Bixby Pond, a body of water that is located south of Route 9/202.

A small western section of Northwood Lake lies in the Town of Epsom. The rest of the Lake lies in Northwood. It serves as a tributary to Little Suncook River.

Round Pond lies southeast of Bear Island beside the Suncook River.

Rivers 11, 12, 13, 14

The Suncook River crosses the Pittsfield town line in the north and flows through the western part of Epsom. It exits in the southwest, where it becomes the boundary between Allenstown and Pembroke.

Little Suncook River flows between Northwood Lake and the Suncook River.

Brooks 11, 12, 13, 14

Deer Brook runs through in the southern part of Epsom from the Suncook River and through wetlands.

Blake Brook features Steeles Falls.

Lockes Brook flows south out of Odiorne Pond until it converges with the Little Suncook River.

Little Bear Brook flows south out of Chestnut Pond until it meets the Little Suncook River.

Mason Brook and the Suncook River meet along the western side of Bear Island.

Marden Brook flows west from the Suncook River into Chichester.

Gulf Brook flows out of Blake Pond in Pittsfield, across the Epsom-Pittsfield town line, through a series of wetlands, to its convergence with the Little Suncook River just east of Bixby Pond.

Hydric Soils

Out of the total land acreage of Epsom (21,696), 11.8% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1749	8.1
Very Poorly Drained - organic base	409	1.9
Very Poorly Drained - mineral base	315	1.5
Marsh	77	0.4
TOTALS	2550	11.8

<u>Watersheds</u>

Epsom lies entirely within the Suncook River watershed. ¹⁰

Aquifers

A very large stratified drift aquifer exists along the Suncook River corridor. This aquifer runs beneath the center of Town and follows Route 28 in a southerly direction. A small portion of an aquifer between Northwood Lake and Penacook Lake lies beneath Epsom soil. ¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found north of Northwood Lake, and along Little Suncook River, Deer Brook and Blake Brook. ¹⁷

Identified Water Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following water resources as being particularly important to the Town: ²⁸

- → Gulf Brook
- ♦ Chestnut Pond
- → Deer Meadow Pond
- → Mason Brook
- → Blake Brook
- → Lockes Brook
- → Deer Brook
- → Marden Brook
- → Little Bear Brook

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Epsom. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Epsom	Region
First Priority	Designated prime wetlands	Rivers and streams
Second Priority	Rivers and streams	Aquifers
Third Priority	Lakes and ponds	Lakes and ponds
Fourth Priority	Other wetlands	Designated prime wetlands
Fifth Priority	Floodplains	Watersheds

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their water resources. ³¹

Specific comments included: 31

- Epsom has a poor conservation ethic. This is the fourth year that the Town tried to obtain a 25% Municipal Use Change Tax Allocation and it was defeated again by a vote of 4-1.
- → We need to involve local people experience.

with appropriate background, schooling and

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 73% of the entire Town. The following table breaks down the components: $^{8, 20, 21, 22}$

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Bronstein Conservation Area easement	Town	17
Cass Pond	NH Water Res Council	
Champney Easement	Town	30
Chestnut Pond	NH DPWH	1
Epsom Grammar School Grounds	Town	5
Ethel Fokas Property	Town	318

Hart Town Forest	Town	71
Jackson easement	Town	75
Alice Kimball Smith easement	Town	107
NH DOT Scenic easement	NH DOT	63
NH DOT Rest Area	NH DOT	3
Northwood Lake	NH Water Res Council	
Town of Epsom Land	Town	6
Town of Epsom Land	Town	4
Town of Epsom Land	Town	2
Town of Epsom Land	Town	4
Town of Epsom Land	Town	14
Town of Epsom Land	Town	6
Webster Park	Town	25
Whitehouse Acres Open Space	Town	12
Current Use	private	14,967
TOTAL ACREAGE PROTECTED		15730

In 1998, Epsom did not support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

2 conservation easements

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Epsom. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Epsom	Region
First Priority	Deeded conservation land (all tied)	Open space
Second Priority	Conservation easements (all tied)	Agricultural land
Third Priority	Town parks (all tied)	Conservation easements
Fourth Priority	Open space (all tied)	Town parks and forests
Fifth Priority	State parks or forests	Deeded conservation lands

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their land and forestry resources. ³¹

Specific comments 31

- 2 Epsom's residents do not value open space or its long term conservation and many officials do not believe in regulations.
- We need to help the Conservation Commission to convince the local government to fund issues. We also need more state and federal funding for regional acquisition. Full time personnel would be useful.



Historical and Cultural Resources

National Register of Historic Places

Epsom currently has no historic locations listed on the National Register. A large effort is required on the part of individuals to promote a place of historic importance through the application process of the National Historic Register. 1, 24

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Currently Epsom has no sites listed with the New Hampshire Division of Historical Resources.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

Industrial mills operated in Epsom during the 19th century. One well-remembered mill stood on Route 4 across from Knowles Store. An old dam and sluiceway still stand in the southeastern corner of Epsom. Some of the Town's most active mills were located along

- the Suncook River.
- The open fields at McClary Farm were a favorite place for mustering during the late 18th and early 19th centuries.
- The Berry House (located near McClary Hill and Blake Brook) is the oldest standing house in Epsom. The cellar has a tunnel that was allegedly used to help run-away slaves escape the South before the Civil War.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Epsom no longer has standing covered bridges, one once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Short Falls	1831	1948

Cemeteries

As do many other small Central Region towns, Epsom has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: 8, 18

CEMETERIES	Owner	Parcel Number / Location
McClary Cemetery	Town	Center Road
Cemetery 1 on North Road	Town	just north of Old Turnpike Road, by its intersection with North Road
Cemetery 2 on North Road	Town	west off North Road, southwest of Chestnut Pond
Cemetery on Route 28	Town	off Route 28, north of the Epsom Traffic Circle
Cemetery 1 on New Rye Road	Town	west of the New Rye Road and Nash Road intersection
Cemetery 2 on New Rye Road	Town	west off New Rye Road, just north of the Allenstown town line
Cemetery 1 on Black Hall Road	Town	east off Black Hall Road, just north of its intersection with New Rye Road and River Road
Cemetery 2 on Black Hall Road	Town	west off Black Hall Road, by Round Pond

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

no specific resources have been identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Epsom. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Epsom	Region
First Priority	Covered bridges	Cemeteries
Second Priority	Museums	Cultural interest sites
Third Priority	Mill sites	Covered bridges
Fourth Priority	Archaeological sites	National Register of Historic Places
Fifth Priority	Cemeteries	Archaeological sites

All of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

No response



B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Epsom since the 1930's and recorded NHI program's database. ²⁷

Small Whorled Pogonia (Isotria medeoloides) is listed as an endangered species in the state of New Hampshire, and is threatened in the rest of the United States. Epsom has one location which has reported harboring this species within the last twenty years.

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been sighted in Epsom within the last 20 years.

The Spotted Turtle (Clemmys guttata) has been sighted once in Epsom during the last 20 years.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Epsom: ^{15, 18 19}

A large riparian corridor is located along the Suncook River which flows through the western part of the Town.

An old railroad grade follows the Suncook River from Epsom's southern Allenstown boundary to its northern Pittsfield boundary.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Epsom: 18

The Suncook River splits in two just south Epsom Circle and rejoins itself just northwest of Round Pond. The land enclosed by the splitting river is called Bear Island, and it is a valuable biological resource.

Odiorne Pond is surrounded by wetlands, offering an important habitat for wetland species.

At this time, no heron rookeries have been identified in Epsom although several local marshes and wetlands may accommodate them.

Identified Ecological Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following ecological resources as being particularly important to the Town: ¹⁸

- B Bear Island
- B Odiorne Pond
- B Little Suncook River
- B Chestnut Pond
- B Deer Meadow Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Epsom. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Epsom	Region
First Priority	Greenway corridors	Scenic vistas
Second Priority	Plant/tree communities	Plant/tree communities (tied w/3rd)
Third Priority	Riparian corridors (tied)	Greenway corridors (tied w/2nd)

Fourth Priority	Animal communities (tied)	Riparian corridors
Fifth Priority	Natural Heritage Inventory sites	Biological diversity

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

B There are large undeveloped blocks of land that should be protected including: the remote Odiorne Pond, the land around the three mountains, and the land close to Bear Brook. A regional plan to conserve these large lands should be initiated. B We need funds for a professional, paid champion.

1 Geologic Resources

Epsom is fortunate to have large number of topographic features. Its differences in elevation offer the opportunity for extraordinary viewsheds: ^{14, 28}

MOUNTAINS AND HILLS	Elevation
Nat's Mountain	1180'
Fort Mountain	1410'
McCoy Mountain	1260'
Brush Hill	960'
Sanborn Hill	920'
Lockes Hill	680'
Barton Hill	800'
Epsom Mountain	960'

Identified Geological Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 Nat's Mountain
- 1 ledge
- 1 McCoy Mountain

- 1 Lamb's Ledge
- 1 Fort Mountain

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Epsom. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Epsom	Region
First Priority	Mountains and hills (all tied)	Mountains and hills
Second Priority	Caves (all tied)	Soils identification
Third Priority	Gorges (all tied)	Sand and gravel deposits
Fourth Priority	Sand and gravel deposits (all tied)	Bluffs
Fifth Priority	Bluffs	Gorges

All of respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources. ³¹

Specific comments 31

Two very large gravel pits along Route 28 should be required to be reclaimed. The Town has done little to require the owner another trailer park) to restore the sites. (who wants to develop the area into

X Recreational Resources

A variety of recreational opportunities and resources exist in Epsom that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

Туре	Location	Acreage / Miles
public	Tarlton Road	458 acres
public	east off Route 28, by the Allenstown town line	1 acre
private		41 acres
private	west off Route 28, south of Epsom Circle	11 acres
	public public private	public Tarlton Road public east off Route 28, by the Allenstown town line private

Epsom Valley Campground	private	east off Route 28, north of Epsom Circle	10 acres
Lazy River Campground	private	off Route 28, along the Suncook River, by the Chichester town line	48 acres
Epsom Grammar School grounds	public	East off Black Hall Road	11 acres
Webster Park	public	off Route 28	28 acres
Scenic Easement at Bixby Pond	public	Bixby Pond, south off Route 9/202	1 acre
Hart Town Forest	public		
Chestnut Pond	public	east of North Road	1 acre
Cornerstone Christian	private	at the intersection of Route 202/9 and Black Hall Road	2 acres

Identified Recreational Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following recreational resources as being particularly important to the Town: ¹⁸

- **X** campgrounds
- **X** town parks and commons
- **×** school grounds

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Epsom. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Epsom	Region
First Priority	Recreation trails (tied)	Recreational trails
Second Priority	Canoe/boating access (tied)	Canoe/boat access
Third Priority	none selected	Outdoor sporting fields
Fourth Priority	none selected	Picnic areas and playgrounds
Fifth Priority	none selected	Beach access

Specific comments 31

X No response



16

Other Identified Resource Priorities

No other resources were identified by the Town.

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Epsom has established both a Conservation Commission and a private Historical Society.

Conservation Commission

Recent activities of the Conservation Commission include: working with BearPaw Regional Greenways on conservation easement acquisitions, reviewing dredge and fill applications, and managing and monitoring Town land. The goal of Epsom's Conservation Commission is to protect the future of critical undeveloped open spaces.

Historical Society

A private Historical Society also exists to help protect Epsom's heritage.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Epsom's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ✓ roadside clean-up
- \square the acquisition of land for conservation easements
- ✓ establishment of trails and vistas

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- funding for personnel
- acquisition of easements

Essential Factors to Epsom's "Quality of Life"

- M a rural atmosphere
- M small town, friendly people
- M balanced land usage
- M the availability of outdoor recreation facilities

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Epsom Zoning Ordinance, 1997
- 7 Town Officials/Employees, 1998
- 8 (Reserved)
- 9 Epsom Site Plan Review Regulations, 1979
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 (Reserved)
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Epsom Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

HENNIKER

Ahout Henniker	
Member of CNHRPC	(
Surveys Mailed	15
Surveys Received for	3
REPP Meeting	
Profile Review &	

Historical Profile

Henniker's first settler was Rev. James Peters of Hopkinton. He and his family moved to the area in 1761, settling in a small log cabin in the northeastern part of Town. In 1768, the Town was incorporated under the name of "Henniker," chosen by Governor Wentworth in honor of Sir John Henniker, a well-to-do London merchant. It was originally a farming community, and its people sustained themselves on the grain they harvested and the livestock they raised. The late 1800's brought the Contoocook Valley Paper Mill to the Town, but manufacturing was only a small contributor to Henniker's overall economy. During the twentieth century, Henniker benefitted from the opening of Pat's Peak, a family ski area. In addition, the Town has prospered due to the establishment of New England College. Founded in 1946 as a place where veterans could receive a college education, the school is now a successful institution that attracts students from across the country. A small, rural community set among scenic hills and a rolling river, Henniker is an attractive place to live and visit.1

Present-Day Profile

The area of Henniker is 28,352 acres, or 44.3 square miles. The Town comprises 5.5% of the CNHRPC area. 2

Over the last twenty-seven years, Henniker's population has grown by 76% while the number of housing units has increased by almost 131%: 3, 4, 5

GROWTH	Populatio n	Net #	Change %	Housin	Net #	Change %	
1970 (US Census)	2348	na	na	708	na	na	
1980 (US Census)	3246	+ 898	+ 38.2	989	+ 281	+ 39.7	
1990 (US Census)	4151	+ 905	+ 27.9	1558	+ 569	+ 57.5	
1997 Population & 1996 Housing (NHOSP)	4122	- 29	7	1633	+ 75	+ 4.8	
TOTAL CHANGE FROM 1970 - 1997		+ 1774	+ 75.6%		+ 925	+130.6 %	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: 6

Town Zoning Districts Ordinances

Town-Adopted Resource & Conservation

Village Proper (1997)	Historic District Regulations
Residential Neighborhood (1997)	Wetlands Conservation Ordinance
Rural Residential (1997)	Excavation Regulations
Heavy Commercial (1997)	Sign Regulations
Medium Commercial (1997)	Floodplain Development Ordinance
Commercial Recreational (1997)	Sexually Oriented Business Ordinance
Village Commerce (1997)	Shoreland Ordinance
Federal Lands (1997)	
Educational District (1997)	

Non-regulatory measures for protecting Henniker's resources include the following: 7, 8, 9

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Land Use Element (1988)	Water Resource Management and Protection Plan (1989)
Conservation and Preservation Element (1988)	
Housing Element (1988)	
Transportation Element (1988)	
Community Facilities and Services Element (1988)	
Recreation Element (1988)	
Utilities Element (1988)	

TOWN RESOURCES



Water Resources

Water Supplies

Henniker depends on groundwater for its drinking water supply. Two gravel packed wells, located on the south side of Route 114, supply water to Henniker Village. Other wells are found on Depot Hill Road and off of the Foster Hill Road Extension. The Town does not use any surface water bodies for its public drinking water supply. ³³

Between 1983 and 1997, the NHDES has issued 143 well permits to residents of Henniker. The most significant cluster of wells occurs in the region known as Tanglewood, just southwest of Long Pond (approximately 70). These new well locations have been mapped by NHDES. ¹⁰

Long Pond, located north of Henniker Village, has a size of approximately 90 acres.

Lower Pond is approximately 12 acres in size.

Upper Pond is one of two small ponds that lie just east of Long Pond. Upper Pond is 25 acres in size, with an average depth of 13 feet. Middle Pond is located just south of Upper Pond.

Pleasant Pond, 92 acres in size, has an average depth of 16 feet. It lies just north of the Weare town line by Vincent State Forest.

Mud Pond is eight acres in size with an average depth of 15 feet.

French Pond is a 33-acre pond that is 19 feet deep on average.

Craney Pond, located at the foot of Craney Hill, is approximately 36 acres in size.

Henniker shares Carr Pond with Hopkinton. It is 11 acres in size, with an average depth of five feet.

The Contoocook River bisects the Town of Henniker as it flows towards the Merrimack River.

Brooks 11, 12, 13, 14

Amey Brook flows through the northwestern corner of Henniker. It feeds into the Contoocook River.

Hydric Soils

Out of the total land acreage of Henniker (28,352), 7.6% is comprised of hydric soils: 14,34

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1279	4.5
Very Poorly Drained - organic base	638	2.3
Very Poorly Drained - mineral base	101	0.4
Marsh	128	0.5
TOTALS	2146	7.6

Watersheds

The Town lies within two main watersheds: the Contoocook River Watershed and the Piscataquog River Watershed. These watersheds can be broken down into 16 smaller watersheds including: the Amey Brook Watershed, the Colby Brook Watershed, and the Liberty Hill Watershed. ^{10, 33}

<u>Aquifers</u>

An extensive high yield stratified drift aquifer underlies the Contoocook River Valley east of Henniker Village. Two medium yield aquifers also exist in Henniker: one is located in West Henniker along the Contoocook River, and another lies along the west side of Route 114 just before the Bradford town line. ^{16, 33}

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found just north of Upper Pond, south of the Contoocook River by Mill Pond, and in lands lying between the Contoocook River and US Route 202.¹⁷

Identified Water Resource Priorities

The CNHRPC's 1980 Open Space and Recreation Plan named the following water resources as being particularly important to the Town: ^{18, 32}

- → Blaisdell Pond
- → Pleasant Pond
- → Cascade Falls
- → Craney Pond
- + significant wetlands off of Old Concord Road
- → Long Pond System (upper, lower, middle)

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Henniker. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community's respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Henniker	Region
First Priority	Aquifers (all tied)	Rivers and streams
Second Priority	Public water supplies (all tied)	Aquifers
Third Priority	Watersheds (all tied)	Lakes and ponds
Fourth Priority	Lakes and ponds (all tied)	Designated prime wetlands
Fifth Priority	Rivers and streams	Watersheds

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their water resources. ³¹

Specific comments included: 31

- + Our regulations are more strict that the rest of the state.
- + We need prime wetlands and shore lands protection legislation, and aquifer protection.
- + Zoning regulations should be made with water resources in mind. We have a lot of flood plains through Army Corps and a Pond system with heavy development pressures.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 69% of the entire Town. The following table breaks down the components: $^{8, 20, 21, 22}$

CONSERVATION LANDS & CURRENT USE	Held By	Acres
Ames State Forest	NH DRED	13
Azalea Park	Town	5
Buekler Parcel	Town	52
Cascade Brook Lot	Town	27

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169
10
1
107

In 1999, Henniker will propose a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition at Town Meeting. ¹⁸

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ^{18, 32}

- 2 College Woods
- 2 Cascade Brook tract (Town owned but not protected) includes wetland with Black Gum
- 2 forests and farms between Bear Hill Road and Quaker Street
- 2 Contoocook River Floodplain

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Henniker. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Henniker	Region
First Priority	Open Space	Open space
Second Priority	Town parks and forests	Agricultural land
Third Priority	Deeded conservation lands	Conservation easements
Fourth Priority	Agricultural land (tied)	Town parks and forests
Fifth Priority	Conservation easements (tied)	Deeded conservation lands

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources. ³¹

Specific comments 31

- 2 Tax breaks should be given to farmers, and farming of all types should be encouraged.
- 2 For zoning to be most efficient we need to supervise loggers better. BMPs are not always used & should be enforced. Protected lands should be tied to greenways, wildlife corridors, etc.





Historical and Cultural Resources

National Register of Historic Places

Henniker has one exemplary site located on the National Register. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1,24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Henniker Town Hall	1/81	On Depot Hill Road	It is now the Henniker Meeting House

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Henniker currently has no sites listed with the New Hampshire Division of Historic Resources.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- Henniker's first post office was established in 1812 by Isaac Rice. He located the facility in Judge Darling's Store, now the site a school parking lot.
- In 1771, the first two story house was built in Henniker. A new plaque now marks this site at 54 Western Avenue (0.55 miles west of the blinker in the village center.)
- Amy Cheney Beach was a famous composer and performer who was born in Henniker in 1867. She was a soloist with the Boston Symphony Orchestra and was highly acclaimed throughout Europe. She spent her summers in Hillsboro. Her birthplace has been marked by a plaque located at 102 Western Avenue (1.1 miles west of the blinker in the village center).
- The first Gristmill was built around 1777. A marker now resides on the unnumbered northern side of Western Avenue on the site of the old Contoocook Valley Paper Company (1.4 miles west of the blinker in village center).
- The first saw mill was built in 1768 at a site along Old Concord Road.

- Around the year 1815, Charles Pingree began to manufacture felt hats. He worked for only two or three years using an old set kettle. He employed no extra help, and he made no profit. Still, the site of his home on Old Concord Road is remembered as the site of the first Hat Factory in Henniker. A marker is located 0.7 miles east of the blinker in the village center.
- The arrival of the first Henniker settler was marked in 1761. Rev. James Peters of Hopkinton settled in the northeastern part of the Town in a region of unbroken forest and very few trails. A marker is located along Route 9/202, 200' north of the road's edge, 1.4 miles east of its junction with Route 114.
- A plaque marks the site of the first blacksmith shop at 29 Shore Drive, in Tanglewood.
- In 1770, the first Town meeting house was erected at a cost of 20 dollars. The first Town Meeting was said to have been held "under the stars" because the roof had not yet been added. The building was destroyed by fire, but a marker commemorates its presence near its original site on Flanders Road.
- The first Town pound was located in the Log Meeting House. The second Town pound was built in 1808, and was encircled by stone. It was used until 1899.
- The first bridge was built in 1780 at the "Middle Place" (the site voted most appropriate by the Town's citizens). It was swept away by floods in 1835 after serving the Town for close to fifty years. A stone arch bridge is now found close to this original site.
- The site of the first school house in Henniker dates back to the time of the Revolutionary War. A marker is found on River Road, 0.5 miles east of its junction with Route 114.
- The first frame house was built in Henniker in 1765 by Captain Eliakin Howe, the second settler to come to Henniker. His child, Persis Howe, was delivered in the house and was the first white child to be born in the Town. A marker is located on Shaker Hill Road, west of the road edge, 1 mile east of Route 114.
- Dr. Hunter was Henniker's first physician; a marker resides on Elm Street at the site of his home.
- A plaque marks the site of the first Henniker store, probably built in the early 1780s.
- The site of the homestead of Rev. Jacob Rice is found at 10 Locust Lane. Rev. Rice from a prominent Massachusetts family and was able to build a house instead of a log cabin.

- The first burial yard was established in 1770. It is located on Old Depot Road.
- The site of the first railroad station (1849) is found at 9 Depot Hill Road. The original station building was replaced and moved to its present location in 1900. The railroad operated out of the original location in the building built in 1900 until the 1960's, when rail traffic ceased. The building itself still exists, having been used as a private dwelling since then.
- Long's Patent, Henniker's first covered bridge, spanned the Contoocook River in West Henniker. Horace Childs built the original bridge, and Frederick Whitney rebuilt it in 1852 after it had been damaged by flooding.
- The Quaker Meeting House is a small white cottage built on the slopes of Mt. Hunger, west of Craney Hill.
- In 1923, the Mutual Telephone Company of Henniker completed the installation of the Town's first telephone line. The line connected 12 buildings, and was connected to a Hopkinton line also.
- Many libraries operated in Henniker unsuccessfully until Mrs. E Maria Cogswell opened the Henniker Free Library in 1889. That was the first step in a long line of success. During the same year, the Town voted to create a Public Library under Mrs. Cogswell's care, and in 1902 George W Tucker left a large part of his estate to the Town for the construction of a new library building. The handsome red brick building adds an almost Victorian flavor to the Town.
- The Ocean Born Mary House is the house where, legend says, Mary Wilson resided with her son James for the latter part of her life. Mary Wilson was only a newborn baby when she traveled to America from Londonderry, England in 1720. While at sea, her ship was taken over by a pirate. The pirate discovered the newborn child but swore to leave the ship unmolested if the child were named Mary after his own mother. He gave the child a bolt of brocaded satin (light green with pink flowers), and he left the ship and its passengers unharmed. Mary lived in Londonderry, NH, until she moved to Henniker to live with her son. In the past, the "Ocean Born Mary House" has attracted many visitors and was reported widely in travel brochures; today, the building is no longer open to the public.
- In 1836, a group of Henniker residents established Henniker Academy to educate the "young persons of both sexes" of Henniker. The building is now used by the Henniker Historical Society.
- The Methodists came to Town in 1814. In 1834 the first Methodist Church was erected, but in 1856 it was moved and used as a barn. The Methodists stayed on in Henniker until 1967.

The Henniker Covered Bridge was built by Milton Graton and his son Arnold in 1972 using traditional covered bridge construction methods. Its use is limited to pedestrians and is owned by New England College.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Henniker has one covered bridge that is still standing, and four more once existed: ^{18, 26}

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Henniker Bridge	1972	standing
RR Franklin Falls	unknown	unknown
Lower Howes Mill	1843	1900
Upper Amsden Mill	1834	1915
RR #186	1871	1921

Cemeteries

As do many other small Central Region towns, Henniker has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Depot Hill Cemetery aka First Burial Yard	Town	Depot Hill Road
Old or Center Cemetery	Town	Grove Street
New Cemetery	New Cemetery Assoc	Old Concord Road
Patterson Hill Cemetery	Town	Patterson Hill Road
Plummer Hill Cemetery	Town	College Hill Road
Colby Cemetery	private	off Dodge Hill Road
Chase Cemetery	private	off Corbin Road
Patten Cemetery	private	Lyman Road
Harriman and Hase Cemetery	private	off Baker Road
Gordon Gravesite	private	Hemlock Corner Loop
Roy Gravesite	private	Bear Hill Road
Quaker Cemetery	Town	Quaker Street

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- Historic Downtown
- Old Brick Factory
- Quaker District

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Henniker. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Henniker	Region
First Priority	Cemeteries	Cemeteries
Second Priority	Cultural interest sites (tied)	Cultural interest sites
Third Priority	Covered bridges (tied)	Covered bridges
Fourth Priority	Archeological sites	National Register of Historic Places
Fifth Priority	National Register of Historic Places	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations do not adequately protect their historical and cultural resources. ³¹

Specific comments 31

- There is little Town communication on some resources. Private interests help in many cases.
- Maintaining a viable zoning and a historic district.



downtown is very important. We need updated

B Ecological Resources

NH Natural Heritage Inventory

Two outstanding plant and animal species have been located in Henniker since the 1930's, as well as one outstanding natural community, and recorded NHI program's database. ²⁷

Farwell's Milfoli (Myriophyllum farwellii) is threatened in NH, but not listed as such federally or globally. Henniker has reported harboring this species, but not in recent history.

One great Blue Heron rookery (Ardea herodias) has been located in Henniker. Only 33 other communities have been officially recorded in NH during the last twenty years.

A natural community valued as very high in importance is the palustrine community Acidic Level Fen which has been found at one location in Henniker within the last 20 years. The State has reported only eleven other such communities.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Henniker: ^{15, 18 19}

The Contoocook River flows out of Contoocook Lake in Jaffrey, and runs in a northeasterly direction into western Henniker. Its runs easterly through the center of the town, cutting the region in two halves. Much of its shore line, natural floodplain areas, is protected by conservation lands.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Henniker: ¹⁸

Foster Conservancy is a 60-acre forest under the management of the Society for the Protection of New Hampshire Forests. It is an important habitat for many plants and animals.

Colby Hill Forest is also overseen by the Society for the Protection of NH Forests. It too offers a ecologically rich habitat.

The conservation wetlands off of Craney Pond Road provide a home for many wetland species. At this time, one heron rookery has been identified in Henniker, and it is believed that several other local marshes may accommodate them also.

Scenic Roads and Vistas

Scenic vistas of flat fields and distant mountains can be seen from Dodge Hill Road. Especially good views of Pat's Peak can be seen from the intersection of Dodge Hill Road and Ray Road. Shaker Hill Road, Mount Hunger, and Bear Hill Road also offer pleasant views. ^{14, 18}

Identified Ecological Resource Priorities

Town officials and volunteers named the following ecological resources as being particularly important to the Town: ¹⁸

- Brown's Way along the Contoocook River
- B Upper Pond Island (which includes old growth trees)

B deer wintering areas

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Henniker. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Henniker Region	
First Priority	Plant/tree communities Scenic vistas	
Second Priority	Natural Heritage Inv. sites	Plant/tree communities (tied w/3rd)
Third Priority	Animal communities (tied) Greenway corridors (tied w/2nd)	
Fourth Priority	Biological diversity (tied)	Riparian corridors
Fifth Priority	Scenic vistas	Biological diversity

All of the respondents felt that Henniker's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

R

B There are no aggressive



programs in place.

than local laws.

State laws are more efficient

1 Geologic Resources

Surficial Geology

Much of Henniker's surficial geology is a result of the latest period of glaciation. Glacially ground-up debris of clay, silt, gravel, and boulders were dumped over the landscape creating a zone of small hills and basins. Evidence of this effect can be seen today in the northeast section of the Town where glacial deposits have formed a drumlin and an esker. The Contoocook River Basin also dictates much of Henniker's surficial geology. It is composed of stratified sand and silt consisting of glacial outwash and recent stream deposits. Sand and gravel deposits are found in scattered kame terraces, and isolated organic deposits occur in some of Henniker's wetlands.¹⁴

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Bear Hill	1380'
Buck Hill	1020'
Colby Hill	Unk.
Craney Hill	1402'
Liberty Hill	1193'
Morrill Hill	1040'
Mount Misery	1080'
Mount Hunger	1350'
Wadsworth Hill	1160'

Bedrock Geology

The most predominant pluton underlying Henniker is the Cardigan Pluton of Kinsman Quartz Monzonite, which underlies the entire western half of the Town. The eastern half is underlain by a variety of different bedrocks including the Littleton Formation of Undifferentiated Schists and Gneisses (mostly grey mica), and the Henniker Pluton of Concord Granite which underlies the Contoocook River. A small southern section of Town is underlain by the Antrim Pluton of Granodiorite-Biotite Quartz Monzonite, and a Hopkinton Pluton of similar composition has been found just west of Route 114 and in the land surrounding Grassey Pond. 14, 18

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

1 no specific priorities were identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Henniker. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

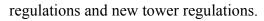
RESOURCE PRIORITIES	Henniker	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Mining sites (all tied)	Soils identification
Third Priority	Bluffs (all tied)	Sand and gravel deposits
Fourth Priority	Sand and gravel deposits (all tied)	Bluffs
Fifth Priority	Gorges and Soils identification (tied)	Gorges

All of the respondents felt that Henniker's ordinances and regulations do not adequately protect their geologic resources. ³¹

Specific comments 31

- 1 We need a plan to restore gravel
- 1 We need updated sand & gravel

pits on natural land.





A variety of recreational opportunities and resources exist in Henniker that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Ames State Forest Natural Area	public	North of Old Route 114, close to the Hopkinton town line	13 acres
Amey Brook Park	public	on the north side of Old Concord Road	
Azalea Park Picnic Area	public		5 acres
Colby Hill Forest Natural Area	public	off of Colby Hill Road	
Community Center Park	public		1 acre
Contoocook River Access	public	River Road	26 acres
Craney Hill Tower Trail Area	public	off of Craney Hill Road, By Pats Peak	
Craney Pond Town Forest	public	off of Craney Pond Road	5 acres
Craney Hill State Forest Natural Area	public	By Craney Hill Road	21 acres

Devil's Den Natural Area	public	off of Route 114, on Mink Hills Road	
Foster Conservancy	private	off of Dodge Hill Road	60 acres
French Pond Boat Launch	private	at French Pond, Off of Dodge Hill Road onto French Pond Road	1 acre
Henniker Trail Travelers	public		
Henniker Middle and Elementary School Grounds	public	Western Avenue	1 acre
Hopkinton-Everett Reservoir Natural Area	public	off of Sugar Hill Road	4200 acres
Hopkinton-Everett Reservoir Trails	public	off of Sugar Hill Road	13 miles
Keyser Pond Fishing Area	public	Keyser Pond, just south of Route 202/9, close to the Hopkinton town line	107 acres
Keyser Pond Camping Area	private	Keyser Pond, just south of Route 202/9, close to the Hopkinton town line	20 acres
Leather Board Bridge Trails	private	off of Route 114, left onto Ramsdell Road, by the steel bridge	
Lee Clement Arena	private	off Route 114 on Circle Street	
Memorial Park	public		1 acre
Mile Away Travel Trailer Park	private		20 acres
Mount Liberty Natural Area	public	off of Liberty Hill Road	
New England College Fields	private	Henniker Village	216 acres
Old Concord Road Trails	public	off of East Main Street, on Old Concord Road	
Pat's Peak Snow Ski Area	private	off of Flanders Road	60 acres
Pleasant Pond Fishing and Boat Launch	public	off of Western Avenue, on Quaker Road at its intersection with Dudley Pond Road	1 acre
Proctor Hills Trails	public		16 miles
Rock N Birch Campground	private	Ray Road	27 acres
The Upper Pond Water Sports Area	public	Upper Pond, off of Rays Road	1 acres
Totten Trails State Forest Natural Area	public	at junction of Butler Road and Chase Road	109 acres
Town Athletic Fields	public		
Vincent State Forest Natural Area	public		7 acres
Woodman Park	public		1 acres

Identified Recreational Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following recreational resources

as being particularly important to the Town: 18

- **X** Keyser Pond
- **★** Mile Away Travel Trailer Park
- X Rock N Birch
- X Azalea Park
- **★** Memorial Park
- × New England College
- X Contoocook River
- **★** Craney Hill State Forest
- **X** Ames State Forest
- **X** Vincent State Forest
- X Totten Trail State Forest
- **X** Pat's Peak
- **X** Town beach
- X Upper Pond
- × Pleasant Pond
- **★** Community Center Park
- **★** Woodman Park

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Henniker. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Henniker	Region
First Priority	Picnic areas and playgrounds	Recreational trails
Second Priority	Outdoor sporting fields (all tied)	Canoe/boat access
Third Priority	Beach access (all tied)	Outdoor sporting fields
Fourth Priority	Recreational trails (all tied)	Picnic areas and playgrounds
Fifth Priority	Canoe/boating access	Beach access

All of the respondents felt that Henniker's ordinances and regulations do not adequately protect their geologic resources. ³¹

Specific comments 31

X Local clubs do most of the planning



and work.

Other Identified Resource Priorities

Henniker officials and volunteers have commented that the following issues are also of extreme importance to the Town: ¹⁸

- * Towns should encourage more sporting clubs and tourism.
- * We should update our zoning and spend more time on town planning.

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Henniker has established both a Conservation Commission and, more recently, a Historical Society.

Conservation Commission

Recent activities of the Conservation Commission include: environmental studies and technical assistance related to the demolition of the Contoocook Valley Paper Company buildings; a review of the NH Department of Transportation's proposal for widening the Edna Dean Proctor (Route 114) bridge; and studies regarding the laying out of new recreational trails.

Historical Society

A private Historical Society also exists to help protect Henniker's heritage. Recent activities of the Society include overseeing the restoration of Academy Hall and the ongoing process of archiving and housing many historical items.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Henniker's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ wetlands inventory and rules enforcement
- ☑ monitoring Henniker's plans for a brownfields site
- □ recycling

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- public education on conservation issues (including wellhead pollution)
- new trails and recreation opportunities
- monitoring the development of open space
- town planning

Essential Factors to Henniker's "Quality of Life"

- M the sense of community due to a viable downtown
- M aesthetic sense of the Town and its open spaces
- M recreation opportunities
- M wildlife
- M good access and proximity to larger areas of population and services
- M good water
- M fair government
- M improved education
- M sanitation
- M good planning
- M indoor and outdoor activities
- M citizen participation
- M more businesses and shopping outlets

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Henniker Zoning Ordinance, 1997
- 7 Town Officials/Employees, 1998
- 8 Henniker Town Annual Report, 1997
- 9 (Reserved)
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Henniker Master Plan: Land Use Element, 1988
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1997
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Henniker Survey Results, 1998
- 32 1997 Inventory of Outdoor Recreation Facilities in New Hampshire, 1997
- 33 Water Resource Management and Protection Plan, April 1998
- 34 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

HILLSBOROUGH

Γ,	Ahout Hillshorough		
	Member of CNHRPC	✓	
	Surveys Mailed	16	
	Surveys Received for Tallying		
	REPP Meeting Participation		
	Profile Review & Comment by	×	

Historical Profile

Hillsborough's first settlers arrived in 1741, but abandoned their homesteads in 1744 when the Cape Bretton War broke out. The area was not resettled until 1757 when the area was granted to Colonel John Hill of Boston. Interestingly, Hillsborough's name predates the John Hill land grant, and was, in fact, named in honor of Wills Hill, the Earl of Hillsborough in England. In 1772, Governor Wentworth incorporated the Town as a part of New Hampshire. Proximity to water played an important part in the physical layout of Hillsborough, and it dictated the location of the Town's village districts. During the late nineteenth century, woolen mills located along the Contoocook River were important to Hillsborough's economy. The twentieth century saw the introduction of electronic manufacturing. Hillsborough, however, followed the same industrial trend as most small New Hampshire towns. Industry remained light, and the Town has retained its pleasant, rural character.¹

Present-Day Profile

The area of Hillsborough is 28,288 acres, or 44.4 square miles. The Town comprises 5.5% of the CNHRPC area. 2

Over the last twenty-seven years, Hillsborough's population has grown by 68% while the number of housing units has also increased by 68%: ^{3, 4, 5}

GROWTH	Population	Net (Change %	Housing Units	Net C	Change %	
1970 (US Census)	2775	na	na	1337	na	na	
1980 (US Census)	3437	+662	+ 23.9	1828	+491	+ 36.7	
1990 (US Census)	4498	+1061	+ 30.9	2157	+329	+ 18.0	
1996 Population & 1997 Housing (NHOSP)	4650	+152	+ 3.4	2252	+95	+ 4.4	
TOTAL CHANGE FROM 1970 - 1997		+1875	+ 67.6%		+ 915	+ 68.4%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Residential	Floodplain Ordinance	
Commercial	Wetland Ordinance	
Rural	Shoreland Ordinance	
Historic	Historic District Ordinance	
	Excavation Regulations	

Non-regulatory measures for protecting Hillsborough's resources include the following: ^{7, 8, 9}

Town Master Plan Elements

Town Conservation Plans, Reports and Studies

Objectives, Principles, and Assumptions (1986)	Hillsborough Conservation Commission Project for Beautification of River Property (1984)
Population (1986)	
Land Use (1986)	
Community Facilities (1986)	
Traffic and Transportation (1986)	
Recreation (1986)	

A revision to Hillsborough's Master Plan will be completed by mid-1999.

TOWN RESOURCES



Water Resources

Water Supplies

Loon Pond is approximately 155 acres in size and serves as the Town of Hillsborough's municipal water supply. The Town owns a large tract of land which encompasses the pond's major watershed, prohibiting development in this area.¹⁴

Between 1983 and 1997, the NHDES has issued 88 well permits to residents of Hillsborough. Many them occur off Bible Hill Road and along Route 9. Other clusters include those private wells installed along Symonds Road, Gibson Road and Meetinghouse Road. These new well locations have been mapped by NHDES. ¹⁰

Loon Pond has an area of 155 acres and serves as Hillsborough's water supply.

Contention Pond, located just northeast of Loon Pond, has an area of 95 acres.

Gould Pond is 48 acres in size and has an average depth of 21 feet. The land surrounding it has been subdivided into private lots used for summer and permanent housing units.

The Jackman Reservoir is often called Franklin Pierce Lake. Hillsborough shares this 519-acre body of water with Antrim.

Three acres of Bagley Pond lie inside Hillsborough while the rest lies within Windsor.

Carter Pond is a small 3-acre pond located in the north central section of the Town.

Rivers 11, 12, 13, 14

The Contoocook River flows for a short distance in the southeast corner of the Town. It crosses the Deering-Hillsborough town line in the south and the Henniker-Hillsborough town line in the west.

Brooks 11, 12, 13, 14

Beards Brook flows between Contention Pond and the Contoocook River.

Sand Brook flows out of Gould Pond. In the north, it feeds into swamp and marsh land.

Shedd Brook flows through the southwestern part of Hillsborough before joining Beards Brook.

Hydric Soils

Out of the total land acreage of Hillsborough (28,288), an unknown acreage is comprised of hydric soils.

Watersheds

Hillsborough lies 1/3 within the Contoocook River watershed and 2/3 within the Beards Brook watershed. 10, 12

Aquifers

Stratified drift aquifers underlie the Contoocook River area, Sand Brook Marsh, and Gould Pond. Aquifers also underlie an irregular strip of wetlands running north-south about two miles east of the Hillsborough-Windsor town line. ¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found in the regions lying west and north of Contention Pond, and in the land surrounding Sand Brook (sometimes referred to as the Farrar Marsh State Wildlife Management Area).¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- ✦ Franklin Pierce Lake
- → Contoocook River Basin
- → Grimes Field Mud Pond
- → Gould Pond
- ♦ Shedd Brook
- → Beard Brook
- → Contention Pond
- → Farrar Marsh

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hillsborough. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hillsborough	Region	
First Priority	Aquifers (tied)	Rivers and streams	
Second Priority	Floodplains (tied)	Aquifers	
Third Priority	Public water supplies	Lakes and ponds	
Fourth Priority	Rivers and streams	Designated prime wetlands	
Fifth Priority	Watersheds	Watersheds	

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

- State and federal regulations are efficient, but it is very hard to pass local ordinances at Town meetings.
- ★ We should update laws to

protect agricultural areas in floodplains.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 74% of the entire Town. The following table breaks down the components: ^{8, 14, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Major Andrews Lot	Town	10
Beard Brook Park	Town	4
Butler Park	Town	1
Chute Forest	SPNHF	124
Conservation Lot on Loon Pond	Town	50
Contoocook Falls	Town	7
Cottrell Place	Town	123
Czajkowski/Pratt Lot	Town	146
Farrar Marsh WMA	NH F&G	476
Fire Department land along the Contoocook	Town	6
Fox State Forest	NH DRED	1445
Gleason Falls	Town	6
Gould Pond	NH DOT	1
Grimes Field	Town	17
Hillsborough Branch - B&M Railroad Land	Town	60
Hillsborough Water Works Land	Town	58
House Rock	Town	20

Jones/Olson Lot	Town	21
Jones/Gibson Lot	Town	47
Low State Forest	NH DRED	1760
Manahan Park	Town	32
Old Town Pound	Town	1
Pierce Homestead Historic Site	NH DRED	13
Riverwalk # 1	Town	55
Riverwalk # 2	Town	17
School District land	Town	18
West Property (Farley Swamp)	Town	2
Current Use		16510
TOTAL ACREAGE PROTECTED		21030

In 1996, Hillsborough supported a 100% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. 23

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: 18

- 2 Manahan Park
- 2 Fox State Forest
- 2 Grimes Field
- 2 Farrar Marsh State Forest
- 2 Chute Forest
- 2 Low State Forest

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hillsborough. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hillsborough	Region
First Priority	Agricultural lands	Open space
Second Priority	Open space	Agricultural land

Third Priority	State parks and forests	Conservation easements
Fourth Priority	Town parks and forests	Town parks and forests
Fifth Priority	Conservation easements	Deeded conservation lands

Half of the respondents felt that the protect their land and forestry



Town's ordinances and regulations adequately resources, while half disagreed. ³¹

Specific comments 31

- 2 State & federal regulations are efficient, but it is very hard to pass local ordinances at Town meetings.
- 2 The Town should be more watchful over logging practices.



Historical and Cultural Resources

National Register of Historic Places

Hillsborough has four exemplary sites located on the National Register. Two of them were nominated and listed in 1975, one in 1966, and one in 1982. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Franklin Pierce Homestead	10/66	On NH Route 31	A frame, two-story house built in 1804 and owned by General Benjamin Pierce, father of President Franklin Pierce. It is now a museum.
Contoocook Mills Industrial District	6/75	Between Mill Street and the Contoocook River	A strip of historic Mills including George Little's Mill, Marcy Mills, and Smith Mills.
Hillsborough Railroad Bridge	6/75	Southwest of NH Route 149, spanning the Contoocook River	
Jonathan Barnes Homestead	3/82	North Road	The home of Rev. Jonathan Barnes, one of Hillsborough's original grantees.

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.²⁵

One of the most well-known historical sites in Hillsborough is the Pierce Homestead, built in 1804 by Benjamin Pierce. Pierce was a Revolutionary War general, the governor of New Hampshire from 1827 to 1830, and the father of Franklin Pierce, the 14th President of the United States. Franklin Pierce was born in this house November 23, 1804. The homestead is located along NH Route 31, just north of its junction with Route 9.

A commemorative marker stands at the place where Colonel John Hill granted a triangular tract of land to Reverend Jonathan Barnes, Hillsborough's first settled minister. The grant provided for the establishment of a church, a meeting house, a school, a Town pound, and Town burial grounds. Descendants of Jonathan Barnes still occupy many of Hillsborough's oldest homes.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: ^{1, 8, 18}

- Four stone arch bridges are found in Hillsborough, all of them constructed during the mid-19th century without mortar and supported only by the careful placing of fieldstones.
- The Dutton Twin Houses on West Main Street belonged to Ephrate Dutton, a well-to-do merchant. The houses were built in 1860 and were identical in style (Greek revival in intent, with French Renaissance windows, Gothic Gables, and a classic facade).
- After his marriage, Franklin Pierce moved out of his father's home and into a house located in Hillsborough Lower Village. The house was built in 1812.
- When Franklin Pierce was campaigning for the presidency, he hosted a mass meeting and barbecue along the Contoocook River near the present location of School Street.
- One of the oldest covered railroad bridges in the United States was located on the Contoocook River near West Mill Street in Hillsborough. It was built in 1869 and rebuilt in 1903.
- Marcy Block, now called Robertson's Block, was created in 1825 and was the first business block in the Town. It was also the site of the first house built in Hillsborough (1741).
- The Hillsborough Community Building, located across form the Post Office on School Street, was at one time the residence of Governor John B. Smith. It now houses the Fuller Library, historic rooms, and Town Offices.
- Woolen mills sustained Hillsborough's economy during the pre and post-Civil War years. Wood's Woolen Mill was located at the intersection of West Mill and Bridge Streets.
- The Town Pound was built in the center of Town during 1774. It has recently been protected by the Conservation Commission.
- The Samuel Bradford Inn, established in 1766, was located on Bible Hill. The first

Hillsborough Town Meeting was held at this inn on November 24, 1772.

Two of Hillsborough's earliest homes are the Timothy Bradford House on Bear Hill Road and the Saltmarsh Place on Stowe Mountain Road. Both were built around the year 1770.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Hillsborough no longer has standing covered bridges, one once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
RR	1877	1985

Cemeteries

As do many other small towns in Central New Hampshire, Hillsborough has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link. There are thirty cemeteries located in the Town of Hillsborough, half of which are owned by the Town: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Hillsborough Center Cemetery	Town	Meeting House Hill
Bear Hill Burial Ground	Town	Bear Hill
Clark Cemetery	Town	
Cooledge Cemetery	Town	
Dascomb Cemetery	Town	
Farrar Cemetery	Town	
Kimball Cemetery	Town	
Maple Avenue Cemetery	Town	
Pine Hill Cemetery	Town	
Preston Cemetery	Town	
St. Charles Cemetery	Town	Shedd Road
5 unnamed town cemeteries	Town	
St. Mary's Cemetery		
Appleton Cemetery		
Gerry Family Cemetery	private	

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

Franklin Pierce Lake

- Fuller Public Library
- Hillsborough Center
- arch bridge on Antrim Road
- arch bridge on Jones Road
- single arch stone bridge off NH Route 149
- twin Arch Bridge off Route 9/202
- arch bride at Gleason Falls
- **Town Pound**
- Appleton Cemetery
- Maple Cemetery
- St. Mary Cemetery
- Hillsborough Center Cemetery
- Gerry Family Cemetery
- Center Burial Ground
- stone bridges
- the Pierce oven

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hillsborough. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hillsborough	Region
First Priority	National Register of Historic Places	Cemeteries
Second Priority	Cultural interest sites	Cultural interest sites
Third Priority	Cemeteries (all tied)	Covered bridges
Fourth Priority	Museums (all tied)	National Register of Historic Places
Fifth Priority	Archeological sites (all tied)	Archaeological sites

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their historical and cultural resources. ³¹

Specific comments 31

There is a lack of interest by



citizens and officials.

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Hillsborough since the 1930's as well as two outstanding natural communities. They have been recorded in the NHI program's database ²⁷

The Blackgum/Red Maple Basin Swamp is a palustrine natural community which has been listed as being of very high importance in the State of New Hampshire. One location in Hillsborough has reported this community within the last twenty years.

Another natural community valued as very high in importance is the palustrine community of the Level Bog. Nineteen communities have been reported in New Hampshire during the last 20 years, one of them in Hillsborough.

Andrew's Genitian (Gentiana andrewsii) is listed as threatened in the State but is not listed as such federally or globally. Hillsborough once harbored this plant, but it has not been found within the last twenty years.

Atlantic White Cedar (Chamaecyparis thyoides) was at one time native to Hillsborough. It has not been found in Hillsborough recently, but 32 locations in the State have named the species during the last twenty years.

The Barren Strawberry (Waldsteinia fragarioides) is listed as threatened in the State, and only two locations have reported this plant during the last twenty years. Hillsborough once reported it also, but not in recent history.

Hillsborough has harbored the Green Adder's-Mouth (Malaxis unifolia) in the past, but not recently. The species is listed as threatened in the State, and only 11 New Hampshire locations have named this plant within the last twenty years.

Hoary Mountain Mint (Pycnanthemum incacum) has been found in Hillsborough in the past, but not recently. It is listed as an endangered plant species, and has only appeared at four New Hampshire locations during the last 20 years.

Kidney-Leaved Violet (Viola nephrophylla) was once native to New Hampshire, but the State has not reported harboring the plant during the past twenty years. The species is listed as threatened.

Pale Early Violet (Viola affinis), endangered in the state of New Hampshire, was once reported in Hillsborough. No locations have been reported recently.

Rue Anemone (Anemonella thalictroides) is a plant valued very highly in importance. One location in Hillsborough has reported the species.

Squaw Root (Conopholis americana) is also valued as very high in importance. Only one location reports harboring the plant. It is threatened in New Hampshire, and only five other locations have been named during the last twenty years.

Hillsborough harbored Squirrel-Corn (Dicentra canadensis) at one time, but not in recent history. The species is threatened in the State of New Hampshire.

Summer Sedge (Carex aestivalis) has been found in Hillsborough in the past, but it has not been located anywhere in New Hampshire during the last twenty years.

Three-Birds Orchid (Triphora trianthophora) is a striking plant species that is threatened in New Hampshire. It was found in Hillsborough at one time, but not recently.

Wedge Sand Blackberry (Rubus cuneifolius) is endangered in New Hampshire but is not listed as such federally or globally. Hillsborough is the only New Hampshire town that has reported harboring this plant during the last twenty years.

One Great Blue Heron rookery (Ardea herodias) has been located in Hillsborough. Only 32 other rookeries have been named in the state.

The Purple Martin (Progne subis) is a species of bird that is listed as threatened in the State of New Hampshire. It has been reported at three locations in Hillsborough.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Hillsborough: 15, 18 19

A large riparian corridor is located along the Contoocook River which flows in the southeast corner of Town.

A utility corridor runs in the southwest part of Hillsborough and crosses the Antrim town line. The corridor joins Franklin Pierce Lake and Beards Brook, offering a potentially important habitat connection.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Hillsborough: 14, 18

Sandbrook Marsh, also called the Farrar State Wildlife Management Area, is owned by the NH Fish and Game and offers a critical habitat for many freshwater wetlands species, especially birds.

Low State Forest is an ecologically rich area that benefits from its own topography. Because of its steep slopes, much of the land is not very accessible. Few roads bypass the area, and wildlife is abundant. The State has begun a forestry management program in this forest.

Fox Forest is a 1400-acre tract of land that is managed by the State. Trails used for walking, jogging, Nordic skiing, and horseback riding are found throughout the area. One of the Forest's most outstanding features is its sphagnum moss quaking bog. The rare community itself can harbor unique plant species such as pitcher plants and cranberries. A boardwalk has been constructed for public access and enjoyment.

Chute Forest lies within conservation land boundaries and provides important woodland habitats for many plants and animals.

At this time, one heron rookery has been identified in Hillsborough and it is presumed that several other local marshes and wetlands may accommodate them also.

Scenic Roads and Vistas

Scenic views of Gleason Falls can be seen from Gleason Falls Road. The area is particularly attractive during the fall, and the site attracts many foliage seekers. ¹⁴

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Fox State Forest
- B Kimball Hill Area
- B Bear Hill Area

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hillsborough. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

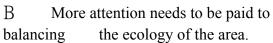
RESOURCE PRIORITIES	Hillsborough	Region
First Priority	Riparian corridors	Scenic vistas
Second Priority	Scenic vistas	Plant/tree communities (tied w/3rd)
Third Priority	Plant communities	Greenway corridors (tied w/2nd)
Fourth Priority	Deeryards (tied)	Riparian corridors

Fifth Priority	Animal communities (tied)	Biological diversity
<u> </u>		

Half of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

B I do not think that the protection of ought to be.





these areas is regulated as effectively as it

what the role is that these resources play in

1 Geologic Resources

Surficial Geology

One natural feature that the Town of Hillsborough protects is House Rock, a large glacial erratic found in the northeastern part of Town. Stratified sand and silt from glacial outwash lie next to the Contoocook River. ¹⁴

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Campbell Mountain	1420'
Jones Hill	1620'
Kimball Hill	1260'
Murdough Hill	1320'
Stowe Hill	1600'
Thompson Hill	1760'

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to Hillsborough: 18

- 1 Gleason Falls
- 1 Fox Forest
- 1 Peaked Hill
- 1 Monroe Hill

- 1 Thompson Hill
- 1 Murdough Hill
- 1 Bible Hill
- 1 Sulfur Hill
- 1 Campbell Mountain

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hillsborough. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hillsborough	Region
First Priority	Soils identification	Mountains and hills
Second Priority	Mountains and hills	Soils identification
Third Priority	Gorges	Sand and gravel deposits
Fourth Priority	Caves	Bluffs



Fifth Priority	Bluffs	Gorges
----------------	--------	--------

Half of respondents felt that the Town's ordinances and regulations do not adequately protect their geologic resources. ³¹

Specific comments 31

- I do not think that the protection of these areas is regulated as effectively as it ought to be.
- 1 We need a better understanding of existing land forms.

X Recreational Resources

A variety of recreational opportunities and resources exist in Hillsborough that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage /
-----------------------------	------	----------	-----------

			Miles
Camp Hillsborough	private	east off Cooledge Road	35 acres
Grimes Field	public	Hillsborough Village	17 acres
Contoocook River Access	public	off Route 9/202 on the Contoocook River, along the Henniker town line	4 acres
Angus Lea Golf Course	private	south off Route 9/202, along the Contoocook River	30 acres
Contoocook Mills Industrial (historic site)	private	Hillsborough Village, off Route 9/202 by the Contoocook River	1 acre
Franklin Pierce Homestead (historic site)	public	by the junction of Route 31 and Route 9	13 acres
Sand Brook Marsh (Farrar Marsh State Wildlife Management Area)	public	by Sand Brook , off Bog Road	297 acres
Fox State Forest	public	off Hillsborough Center Road, north of Hillsborough Village	1445 acres
Low State Forest (shared with Bradford)	public	east from Country Road, by the Bradford town line	695 acres
Chute Forest	private	off Farley Road	124 acres
Beard Brook Park	public	off Beard Road	4 acres
Gleason Falls	public	on Beards Brook, south if Gleason Falls Road	4 acres
Gould Pond	public	south from Gould Pond Road	1 acre
Manahan Park	public	off Route 9/202 on Franklin Pierce Lake	32 acres
Butler Park	public	Hillsborough Village	1 acre
Riverwalk	public	Hillsborough Village, along the Contoocook River	

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- **X** Fox State Forest
- **★** Manahan Park (beach and boat access)
- **x** snowmobile trails network
- X Contoocook River Trail
- × Pierce Lake boating
- **★** Emerald Lake (Gould Pond) boating
- X Grimes Field
- **★** Beards Brook

Survey Findings

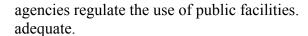
The following table documents the general resource priorities of those who returned surveys from the Town of Hillsborough. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hillsborough	Region
First Priority	Picnic areas and playgrounds	Recreational trails
Second Priority	Beach access	Canoe/boat access
Third Priority	Canoe/boating access	Outdoor sporting fields
Fourth Priority	Outdoor sporting fields	Picnic areas and playgrounds
Fifth Priority	Recreational trails	Beach access

Half of the respondents felt that the Town's ordinances and regulations do adequately protect their public facilities resources. 31

Specific comments 31

- X Basic rules established by specific
- X Current facilities are mostly





Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

- Jackman Hydro Electric
- Bridge Street Hydro Electric
- Mill Street Mills
- * Angus Lea Golf Course

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Hillsborough has created a Historic District and has established both a Conservation Commission and a private Historical Society.

Conservation Commission

Recent activities of the Conservation Commission include: developing a nature trail which passes under the Hillsborough Bypass; forming a committee to oversee the conservation of suitable open space; advising dredge and fill applicants; and organizing the annual community Contoocook River Clean-up. In 1997, a parcel of land (Tax Map 5, Lot 55) was recorded with the Town, and Linda Stellato was rewarded the Loon Award for the work she did to establish a recycling system in Hillsborough.8

Historic District

Hillsborough's 185 acre Historic District surrounds Hillsborough Center. The buildings are mostly made of wood with some brick, and they stand individually and usually do not share a common wall 32

Historical Society

A private Historical Society also exists to help protect Hillsborough's heritage. Recent activities of the Society included the management and restoration of the Franklin Pierce Homestead.⁸

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Hillsborough's responses to the natural, cultural, and historical resources survey: 31

Conservation Activities Undertaken Within the Last Three (3) Years $\overline{\mathsf{V}}$ recycling

Conservation Activities Planned or Anticipated Within the Following Three (3) Years continuation of current projects

Essential Factors to Hillsborough's "Quality of Life"

M the re-evaluation of resources by an outside panel (this process helps to guide the community in a productive direction)

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Hillsborough Zoning Ordinance, 1989
- 7 Town Officials/Employees, 1998
- 8 Hillsborough Town Annual Report, 1996 & 1997
- 9 Hillsborough Site Plan Review Regulations, 1982
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Natural, Scenic, & Historic Areas in Hillsborough County, 1968
- 14 Hillsborough Master Plan, 1986
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1996
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 (reserved)
- 31 Hillsborough Survey Results, 1998
- 32 CNHRPC Historic Districts and Downtown Revitalization

HOPKINTON

Ahout Honkinton	
Member of CNHRPC	✓
Surveys Mailed	13
Surveys Received for Tallying	4
REPP Meeting Participation	✓
Profile Review & Comment by	×

Historical Profile

This Town was founded by the residents of Hopkinton, Massachusetts in 1736, and was not incorporated as a part of New Hampshire until 1765. Hopkinton was originally a farming town, and the presence of fertile land and water power dictated its growth. The most populated part of Town was the Village Center where the congregational Church and Meeting house were erected as early as 1766. Hopkinton was an important meeting place during the 1790's, and the Town battled briefly with Concord for the designation of New Hampshire's state capital. Light industry and trade also affected Hopkinton's development, but in recent history the Town as been characterized more often as a residential area than as a place for industry and business. Its historic main strip with its handsome churches, federal houses, and Town hall is one of the most beautiful "white villages" in Central New Hampshire.¹

Present-Day Profile

The area of Hopkinton is 28,416 acres, or 44.4 square miles. The Town comprises 5.5% of the CNHRPC area. ²

Over the last twenty-seven years, Hopkinton's population has grown by 67% while the number of housing units has increased by 87%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	<u>Net C</u> #	Change %	
1970 (US Census)	3007	na	na	1104	na	na	
1980 (US Census)	3861	+ 854	+ 28.4	1480	+ 376	+ 34.1	
1990 (US Census)	4806	+ 945	+ 24.5	1924	+ 444	+ 30.0	
1997 Population & 1996 Housing (NHOSP)	5014	+ 208	+ 4.3	2064	+ 140	+ 7.2	
TOTAL CHANGE FROM 1970 - 1997		+ 2007	+ 66.7%		+ 960	+ 87.0%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Residential/Agricultural	Local Regulation of Excavation
Low Density Residential	Cluster Development Ordinance
Medium Density Residential	Manufactured Housing Ordinance
High Density Residential	Affordable Housing - Innovative Land Use Control
Commercial	Sign Regulations
Industrial	Wetland Regulations
Hopkinton Village Precinct	Floodplain Development Ordinance

Non-regulatory measures for protecting Hopkinton's resources include the following: ^{7, 8, 9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Policies Element (1987)	
Community/Population Profile (1987)	
Housing Element (1987)	
Transportation Element (1987)	
Land Use Element (1987)	
Recreation Element (1987)	
Economic Base Element (1987)	
Natural and Historic Resources: Conservation and Preservation Element (1987)	
Community Facilities Element (1987)	
Utilities and Public Services Element (1987)	
Hopkinton Fiscal Analysis Element (1987)	
Growth Management Element (1987)	

TOWN RESOURCES



Water Resources

Water Supplies

There are two public water districts that serve the Town of Hopkinton: the Hopkinton Precinct which is supplied by a granite packed well off of Briar Hill Road, and the Contoocook Precinct which relies on the 70-acre Bear Pond in Warner.

The remainder of the Town relies on private wells for their water supply. Between 1983 and 1997, the NHDES has issued 159 well permits to residents of Hopkinton. Many are located in the southeastern corner of Town by Straw Road and the Hooksett Turnpike. Other clusters occur by Galloping Hill Road (13) and Hopkins Green (18). These new well locations have been mapped by NHDES. ¹⁰

Ponds ^{11, 12, 13, 14}

The Hopkinton-Everett Lakes Reservoir protects Hopkinton from flooding. The flood reduction mechanism is comprised of a dam at Hopkinton Lake along the Contoocook River, a dam at the Everett Lake in Weare, and a two mile canal which connects the two bodies of water. The Hopkinton-Everett Reservoir provides Hopkinton with a variety of recreational opportunities including Elm Brook Park.

Drew Lake lies southeast of the Hopkinton-Everett Reservoir. It has an area of approximately 38 acres and is a popular fishing site.

Whittier Pond, also called Fry Pond, is a natural pond that has been raised by damming. It is 14 acres in size and has a average depth of four feet.

Kimball Pond is approximately 75 acres in size. The Town uses the pond as a beach and recreation area. It serves as a tributary to Dolf Brook.

Clement Pond, also called Joe Silver Lake, is 100 acres in size and has a maximum depth of 50 feet. It serves as a tributary to Hardy Spring Brook.

Hopkinton shares Carr Pond with Henniker. This 11-acre Pond has an average depth of five feet.

Hopkinton and Henniker also share Grassey Pond, a marshy pond 20 acres in size that is located west of Clement Pond.

Rolf Pond is 30 acres in size. It lies southeast of Clement Pond and northwest of Carr Pond.

Rivers ^{11, 12, 13, 14}

The Contoocook River has been cited as Hopkinton's prime natural resource. It runs through the center of Hopkinton and crosses the Concord town line in the east and the Henniker town line in the west. It is a tributary of the Merrimack River.

The Warner River and the Blackwater River also flow short distances in Hopkinton.

A headwater area of the Turkey River Basin lies in the southeast corner of Hopkinton.

Brooks 11, 12, 13, 14

Dolf Brook flows between Kimball Pond and the Contoocook River.

Hardy Spring Brook flows between Clement Pond and the Contoocook River.

One Stack Brook crosses the boundary between Bow and Hopkinton.

Hydric Soils

Out of the total land acreage of Hopkinton (28,416), 16.5% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	2506	8.8
Very Poorly Drained - organic base	1383	4.8
Very Poorly Drained - mineral base	650	2.2
Marsh	200	.7
TOTALS	4739	16.5

Watersheds

The Town lies almost entirely with in the Contoocook River watershed. The southeastern corner of the Town lies in the Merrimack River watershed. The Warner River watershed and the Silver River watershed underlie small areas in the north. ¹⁰

<u>Aquifers</u>

A stratified drift aquifer underlies nearly half of the Town. 16

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found along One Stack Brook, Hardy Spring Brook, and in the land surrounding Stumpfield Marsh. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- → Kimball Pond
- ★ The Contoocook River Corridor
- + Chase Sanctuary Watershed, on the west side of Jewett Road
- ★ The Dolf Brook Aguifer

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hopkinton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hopkinton	Region
First Priority	Public water supplies	Rivers and streams
Second Priority	Aquifers	Aquifers
Third Priority	Designated prime wetlands	Lakes and ponds
Fourth Priority	Rivers and streams	Designated prime wetlands
Fifth Priority	Lakes and ponds	Watersheds

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

- Hopkinton needs more stringent regulations on development in these areas. We should protect all wetlands, not just prime ones. Electric companies are spreading herbicides and sludge.
- → A wetland inventory is needed.



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 83% of the entire Town. The following table breaks down the components: ^{8, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Agricultural and Forest Land	NH DA	239
Brown/Robinson Lot	Town	14
Carriage Lane Lot	Town	1
Chase Wildlife Sanctuary	ASNH	660
Contoocook River Natural Area	Town	97
Contoocook State Forest	NH DRED	28

Dustin Country Club	Private	40
Farrington Corner	Town	96
French Lot	Town	10
Galloping Hills Open Space	Town	25
George's Park	Town	9
Goodwin-Chandler State Forest	NH DRED	26
Grassey Pond Marsh Dam & Row	NH F&G	1
Hopkins Green Open Space & Flowage Area	Town	16
Hopkinton Elementary School Grounds	Town	8
Hopkinton-Everett Reservoir (including Elm Brook Park)	US Army Corps	4,918
Hopkinton High School Grounds	Town	3
Houston Farm	Town	68
Irishmen's Hill Open Space	Town	45
Frank & Dorothy Kimball easement	NH DA	178
Robert Kimball easement	NH DA	62
Kimball Lake	Town	20
Kimball Pond Recreation Area	Town	3
Janeway easement	Town	6
Rachel Johnson Land (LCIP)	Town	93
Mast Yard State Forest (Hopkinton portion)	NH DRED	461
Martin Elementary School Grounds	Town	7
Meadowsend Timberlands easement	Town	7
Murphy easement	Town	13
NE Community Development Group Land	Town	96
Pages Corner State Forest	NH DRED	84
Smith Pond Bog Wildlife Sanctuary	ASNH	61
Town of Hopkinton Land	Town	43
Town of Hopkinton Land	Town	4
Town of Hopkinton Land	Town	46
Town of Hopkinton Land	Town	12
Town of Hopkinton Land	Town	15

Town of Hopkinton Land	Town	19
Town of Hopkinton Land	Town	34
Town of Hopkinton Land	Town	15
Town of Hopkinton Land	Town	6
Town of Hopkinton Land	Town	24
Town of Hopkinton Land	Town	16
Town of Hopkinton Land	Town	31
Town of Hopkinton Land	Town	42
Wells easement	Town	115
Current Use		15,800
TOTAL ACREAGE PROTECTED		23617

In 1998, Hopkinton supported a 35% land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- Farmlands, especially farms that are still active
- 2 Hawthorne Town Forest, on the east side of Hopkinton Village
- 2 Old Well Fields, northwest of Hopkinton Village
- 2 Brockway Wildlife Reserve

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hopkinton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hopkinton	Region
First Priority	Open space	Open space
Second Priority	Town parks and forests	Agricultural land
Third Priority	Agricultural land	Conservation easements
Fourth Priority	Orchards	Town parks and forests

Half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. ³¹

Specific comments 31



- Current use tax regulations must
- 2 The Conservation Commission's monitoring and zoning ordinances are efficient.
- Town officials need to change their attitudes to support more open space land and current use land. We need to encourage agriculture and forest activities.



Historical and Cultural Resources

National Register of Historic Places

Hopkinton has four exemplary sites located on the National Register. Two were listed in 1980, the other in 1977. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Hopkinton Railroad Covered Bridge	1/80	Off NH 103 and NH 107	Built in 1850, reconstructed in 1889, and saved from flood-destruction in 1936 & in 1938, this is the oldest covered railroad bridge still standing in the US.
Rowell's Bridge	Unk.	On Cement Hill Road over the Contoocook River, North of NH Route 127	Built in 1853 and classified as a combination of Long Truss with Burr arches.
William H. Long Memorial	7/77	Main Street	
Howe - Quimby House	6/80	Sugar Hill Road	Now houses Sugar Hill Antiques

Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Hopkinton currently has no sites listed with the New Hampshire Division of Historic Resources.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various

other, yet not less important, historic landmarks and events: 1, 8, 18

- St. Andrew's Episcopal Church was built in 1827-1828. It is located in Hopkinton Village.
- The clapboard farm house at Boulder Farm was built in 1816.
- A memorial tablet resides on Beech Hill Road to honor the birth of Abraham Kimball, the first white male born in Hopkinton.
- Kimball's Garrison was located on old "Main Road" in 1744. A marker now commemorates the place.
- A tablet marks the birthplace of Grace Fletcher (born in 1765), the first wife of Daniel Webster. A marker resides on the west side of Garrison Lane.
- The first gristmill was built in Hopkinton in 1765 opposite the Kimball Lake dam off of old "Main Road".
- In 1825, the Town of Hopkinton hosted a reception for Lafayette at a site near St. Andrew's Church.
- The first Meetinghouse was built in the Village Square in 1766, but it burned down in 1789. A tablet now marks the location.
- On Old Putney Road, a tablet commemorates the site of the first Town Pound which was built in 1805.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Hopkinton is unique in that it has two covered bridges still standing, and three more existed at one time: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Henniker Road	1862	1935
Contoocook Village	1853	1935
Tyler	1858	1938
Hopkinton Railroad Covered Bridge	1849-1850	standing
Rowell's Bridge	1853	standing

Cemeteries

As do many other small Central Region towns, Hopkinton has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Contoocook Village	Town	Contoocook Village
Old Hopkinton (old)	Town	in Hopkinton Village
Old Hopkinton (new)	Town	at I-89, Exit 4
New Hopkinton	Town	
Blackwater	Town	at intersection of Penacook and Old Dustin Roads
Stumpfield	Town	Stumpfield Road
Clement Hill	Town	
Putney Hill	Town	
Hardy/Little	private	
Hues/Wilson/Buckley	private	
Putnam	private	

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- arly school houses
- Putney Hill historic sites
- Broad Cove and King Pines
- West Hopkinton Mill
- covered bridges
- fairgrounds
- cemeteries
- Town Pound
- old mill sites scattered through out the Town
- Village centers

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hopkinton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hopkinton	Region
First Priority	Covered bridges	Cemeteries
Second Priority	Unique stone walls	Cultural interest sites
Third Priority	Mill sites	Covered bridges
Fourth Priority	Archaeological sites	National Register of Historic Places
Fifth Priority	Unique cellar holes	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

- Special interest groups are the most efficient.
- Open space is part of our historic culture.
- We need our local officials to pay more attention to preserving Hopkinton's historic resources. Old cellar holes are perceived as hazardous.
- The Town needs a historic district.



B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Hopkinton since the 1930's, as well as two outstanding natural communities, and recorded NHI program's database. ²⁷

Giant Rhododendron (Rhododendron maximum) has been reported at four sites in New Hampshire within the last 20 years. Hopkinton once harbored this species also, but no locations have been reported recently.

Gypsywort (Lycopus rubellus) was at one time native to Hopkinton, but it has not been seen during the last twenty years in the Town.

Wild Lupine (Lupinus perennis) is threatened in New Hampshire. Twenty-six locations have reported harboring the plant within the last twenty years, including Hopkinton.

Three locations in Hopkinton have reported the presence of Great Blue Heron rookeries (Ardea herodias). Only 33 locations have been named in the entire State.

Purple Martin (Progne subis) is threatened in New Hampshire, and has been located at only 10 sites in the state within the last twenty years. Purple Martins at one time were found in Hopkinton, but none have been reported recently.

The invertebrate mollusk Brook Floater (Alasmidonta varicosa) is listed in the State as endangered. Only one occurrence in Hopkinton within the last 20 years has been recorded.

A Mesic Transitorial Forest on Acidic Bedrock or Till is a terrestrial natural community. The unusual community was at one time found within Hopkinton.

The Level Bog is a palustrine natural community that was once located in Hopkinton, but the Town has not reported the presence of the community during the last twenty years.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Hopkinton: 15, 18 19

The Contoocook River corridor runs northeast through the Town of Hopkinton.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Hopkinton: ¹⁸

The Brockway Nature Preserve is a critical environment for many plant and animal species. A recent donation of land adjacent to the preserve will help to protect the area.

The wetlands surrounding the Hopkinton-Everett Reservoir offer an ideal habitat for many plant and animal species. Stumpfield Marsh in particular serves as important breeding grounds for a variety of wildlife including: pickerel, bass, blue heron, water foul, red wing blackbirds, beavers, rabbits, and racoons.

Three heron rookeries have been identified in Hopkinton, and it is expected that other local marshes and wetlands accommodate them also.

Scenic Roads and Vistas

The summit of Gould Hill offers scenic vistas. 14

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B the filled-in kettle hole on Broad Cove Road
- B Smith Pond Bog
- B Gould Hill scenic area
- B Putney Hill scenic area

- B Beech Hill scenic area
- B deeryards

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hopkinton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hopkinton	Region
First Priority	Riparian corridors	Scenic vistas
Second Priority	Scenic vistas	Plant/tree communities (tied w/3rd)
Third Priority	Greenway corridors	Greenway corridors (tied w/2nd)
Fourth Priority	Biological diversity	Riparian corridors
Fifth Priority	Deeryards	Biological diversity

Half of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources, while half disagreed. ³¹

Specific comments 31

- B We need shorter and more stringent regulations. These areas are defaced during the hunting season.
- B The Conservation Commission's monitoring and zoning ordinances are efficient protection.
- B We need to incorporate the Master Plan. protection of these ecological areas into the

1 Geologic Resources

Surficial Geology

Kames and kame terraces are found in Hopkinton's northern and western areas. Flood plain alluvium underlies the Contoocook River, and a few drumlins are located in the Town's center close to Smith Pond and Kimball Pond. 12, 14

Additional and perhaps more recognizable geologic formations are mountains and hills: 14, 28

MOUNTAINS AND HILLS	Elevation
Beech Hill	780'
Clement Hill	760'
Dimond Hill	660'
Gould Hill	840'
Irishmans Hill	780'
Mt. Hope	740'
Putney Hill	780'
Rattlesnake Hill	640'

Bedrock Geology

About half of Hopkinton is underlain by an unnamed pluton composed of Granodiorite-Biotite Hranodiorite-Biotite Quartz Monzonite (mostly quartz, some garnet). A Kinsman Quartz Monzonite compound underlies a strip of land extending from the Town's northeast corner south to the Hopkinton-Weare town line. Grey Gneiss is found in Hopkinton's northwest territory underlying Clement Pond. 14,18

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ^{18, 28}

- 1 sand and gravel deposits
- 1 summit of Gould Hill
- l esker along Briar Hill Road
- 1 unusual quartz formations
- 1 spring and gravel bank

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hopkinton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hopkinton	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Eskers, kames, and drumlins	Soils identification
Third Priority	Caves	Sand and gravel deposits
Fourth Priority	Bluffs	Bluffs
Fifth Priority	Soils identification and Sand and gravel deposits (tied)	Gorges

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources. ³¹

Specific comments 31

The Conservation Commission's monitoring and zoning ordinances are the most efficient. Glacial boulders and topography are important.

of protection.

1 We need to identify areas in need

X Recreational Resources

A variety of recreational opportunities and resources exist in Hopkinton that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: $^{18, 29, 30}$

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Sandy Beach Camping area	private	west off Clement Hill Road	8 acres
Elm Brook Park	public		
George's Park	public	off Kearsarge Avenue	9 acres
Harold Martin Elementary School	public	off Route 202/9	7 acres
Camp Merrimack	private	Clement Pond	150 acres
Maple Street School	public	off Route 127, south of its junction w/ Route 103	8 acres
Hopkinton High School	public		3 acres
Duston Country Club	private	off Route 202/9, north of Hatfield Corner	40 acres
Contoocook State Forest	public	off Route 202/9, by the Henniker town line	35 acres

Goodwin-Chandler State Forest	public	Off Interstate 89, west of its junction with Route 13	26 acres
Mast Yard State Forest	public	between the Contoocook River and Broad Cove Road, by the Concord town line	380 acres
Chase Forest and Bird Sanctuary	private	accessible from New Road	380-430 acres
Smith Bog	private	between Interstate 89 and Route 9/202 just west of Hopkinton Village	62 acres
Contoocook River Natural Area	public	adjacent to Mast Yard State Forest	99 acres
Hopkinton Fair Grounds	private	north-central Hopkinton, off Route 103/127	60 acres
Dan Mar Riding Academy (horse trails)	private		12 miles
Gulliver's Riding Stable (horse trails)	private	off Jewett Road, by the Chase Bird Sanctuary	50 miles
Kimball Pond (beach)	public	off Hopkinton Road	2 acres
Stumpfield-Mudgett Recreation Area	public		
Elm Brook Recreation Area	public	Elm Brook Park	
Drew Lake Recreation Area	public	Drew Lake	
Clement Pond (fish/boat launch)		Clement Pond, off Shore Lane Drive	
Pages Corner State Forest	public	off Stickney Hill Road, by the Dunbarton town line	
Rachel Johnson Forest	public	off Hopkinton Road	93 acres
John Brockway Nature Area	public	south off Interstate 89, close to Concord	96 acres
Hopkinton Everett Reservoir Hiking trail	public	Hopkinton Everett Reservoir	13 miles

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: 18

- **★** Hopkinton-Everett Flood Control
- **X** Town Hall
- **★** Houston Farm
- **X** golf courses
- × Kimball Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Hopkinton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Hopkinton	Region
First Priority	Recreational Trails	Recreational trails
Second Priority	Picnic areas and playgrounds	Canoe/boat access
Third Priority	Canoe/boat access	Outdoor sporting fields
Fourth Priority	Outdoor sporting fields	Picnic areas and playgrounds
Fifth Priority	Beach access	Beach access

Specific comments 31

- **X** Recreational trails should have specific organizations responsible for their upkeep.
- X The Conservation Commission's monitoring and zoning ordinances are the most efficient.
- **X** Hopkinton has a Recreation to pubic facilities.

Planner. We need to continue improvements

Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

* utility corridors

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Hopkinton has established both a Conservation Committee and a private Historical Society.

Conservation Commission

The Hopkinton Conservation Commission, formed in 1965, oversees the Town's conservation issues. Events of 1997 include: the approval of a 35% Land Use Change Tax to go to the HCC Conservation Fund, the donation of the Bean property which borders the Brockway Nature Preserve, and the completion of a bird survey conducted by the Army Corp of Engineers.

Historical Society

A private Historical Society also exists to help protect Hopkinton's heritage. The Society continues to
historical gather and archive documents and

artifacts. The Antiquarian Society is currently exhibiting its summer show which features artwork done by local artists.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Hopkinton's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ highway clean-ups
- ✓ tree planting
- ✓ erosion abatements
- ✓ public education
- ✓ monitoring and work on recreational trails
- ☑ educational meeting on vernal pools
- ☑ land acquisitions
- ☑ began a town inventory

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- environmental education
- continuation of current programs
- forest management plans and inventories for the Town
- continued utilization of Town land for recreation, hunting, nature trails, snowmobiling, and hiking
- re-landscaping the Town center
- repairing pond dams

Essential Factors to Hopkinton's "Quality of Life"

- M good schools
- M community spirit
- M slow or no growth
- M retainment of open space
- M "central village" concept
- M clean water and air
- M no sludge spreading

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Hopkinton Ordinance and regulation Handbook, 1997
- 7 Town Officials/Employees, 1998
- 8 Hopkinton Town Annual Report, 1997
- 9 (Reserved)
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Hopkinton Master Plan, 1987
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Hopkinton Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

LOUDON

Ahout I oudon	
Member of CNHRPC	✓
Surveys Mailed	16
Surveys Received for Tallying	2
REPP Meeting Participation	√
Profile Review & Comment by	×

Historical Profile

Before Europeans migrated north into the Merrimack Valley area, many Native American tribes lived in the region. The land now called Loudon was home to an Abenaki tribe, and the highest point in Loudon, Sabbattus Heights, is named after an Abenaki Chief. Loudon, originally a part of Canterbury, was incorporated and officially named in 1773. The Town was named for John Campbell, the fourth Earl of Loudon and one of the grantors of Canterbury. Agriculture was the primary industry in Loudon from before its incorporation through to the early 1900's. A second major industry in early Loudon was the making of maple sugar; in 1849, Loudon produced some 22,619 pounds of maple sugar. Over the years, Loudon has managed to keep much of their rural character while still being home to the New Hampshire International Speedway, which brings in more spectators than any other event in New England.¹

Present-Day Profile

The area of Loudon is 29,696 acres, or 46.4 square miles. The Town comprises 5.8% of the CNHRPC area. ²

Over the last twenty-seven years, Loudon's population has grown by 164% while the number of housing units has increased by 192%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	<u>Net Cl</u> #	nange %	
1970 (US Census)	1707	na	na	568	na	na	
1980 (US Census)	2454	+747	+ 43.8	880	+312	+ 54.9	
1990 (US Census)	4114	+1660	+ 67.6	1476	+596	+ 67.7	
1997 Population & 1996 Housing (NHOSP)	4504	+390	+ 9.5	1657	+181	+ 12.3	
TOTAL CHANGE FROM 1970 - 1997		+2797	+ 163.9%		+1089	+ 191.7%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Village District	Cluster Development Regulations
Rural Residential District	Manufactured Housing Ordinances
Commercial/Industrial District	Excavation Regulations
Agricultural/Forestry Preservation District	Wetland Ordinances
Wetland Conservation District (overlay)	Aquifer Ordinances
Steep Slope District (overlay)	

Non-regulatory measures for protecting Loudon's resources include the following: ^{7, 8, 9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Objectives (1992)	
Population Characteristics (1992)	
Land Use (1992)	
Housing (1992)	
Community Facilities (1992)	
Transportation (1992)	
Utilities (1992)	
Excavation (1992)	

TOWN RESOURCES



Water Resources

Water Supplies

All of Loudon's households and businesses depend on groundwater that is stored in natural aquifers and accessed by private wells. Between 1983 and 1997, the NHDES has issued 132 well permits to residents of Loudon. Well clusters occur in more densely populated residential areas. Noticeable concentrations occur along Route 106, west of Oak Hill Road, and in the region defined roughly by Currier Road, Clough Hill Road, and Young Hill Road. These new well locations have been mapped by NHDES. 10, 18

Ponds 11, 12, 13, 14

Clough Pond is located on Loudon's western border with Canterbury. It is a 45-acre pond with a maximum sounded depth of over 55 feet.

Crooked Pond is a 29-acre pond with an average depth of 13 feet. This pond is located in the southeastern portion of Loudon, not far from the Chichester town line.

Sanborn Pond is located in east central Loudon near the Chichester town line. Sanborn is a 104-acre pond with a maximum sounded depth of 23 feet.

Holt Pond, or Unnamed Pond #3, is a 43-acre pond with an average depth of five feet.

Rivers 11, 12, 13, 14

With its headwaters in Gilmanton, the Soucook River forms in the northwestern portion of Loudon from the confluence of several brooks. The Soucook joins more streams further down river and grows in size as it continues through Loudon in a southeasterly direction toward the Concord/Pembroke border.

Brooks 11, 12, 13, 14

Academy Brook flows into Loudon from Gilmanton. In Loudon, it travels several miles to Kimball Brook and Bumfagon Brook and helps form the Soucook River.

Kimball Brook flows along the Loudon/Canterbury border for a few miles from Rocky Pond before it enters Loudon. The brook then travels a short distance to converge with Academy Brook.

Bumfagon Brook forms in the central northern portion of Loudon and then travels about a mile until it converges with the Soucook River.

Clarke Brook flows from a small pond in central Loudon a few miles to the Soucook River.

Pine Island Brook forms around Hunting Swamp in southwest Loudon and flows southeast for a few miles until it joins the Soucook River.

Bee Hole Brook begins north of Crooked Pond in a marshy area and is increased by the outflow

of Crooked Pond. The brook then flows south into Giddis Brook and then into the Soucook.

Giddis Brook flows into Loudon from Chichester in the southeast corner of Loudon. The brook flows a short distance in Loudon and eventually meets the Soucook River.

Hydric Soils

Out of the total land acreage of Loudon (29,696), 14.8% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	3163	10.7
Very Poorly Drained - organic base	725	2.4
Very Poorly Drained - mineral base	270	.9
Marsh	224	.8
TOTALS	4382	14.8

Watersheds

The Soucook River and the Suncook River watershed dominate Suncook's surface drainage system. More than 75% of the Town's area is drained into the Suncook River, either directly or through a series of tributaries. The Suncook River watershed drains the far eastern part of the Town. 10, 12

Aquifers

A large coarse-grained stratified drift aquifer exists along the Soucook River corridor in Loudon. This aquifer stretches from Rocky Pond at the junction of the Gilmanton/Loudon/Canterbury border and travels south along Route 106 until the Soucook forms from the confluence of small streams. From there, the aquifer travels south again. It underlies the Soucook River and runs between Concord and Pembroke. ¹⁶

Wetlands

Many small and medium sized wetlands exist throughout Loudon. A large wetland is located in the southwestern corner of Loudon between Route 106 and Old Shaker Road. Another large wetland can be found east of Route 129 in central Loudon. Several medium sized wetlands can be found in the northeastern corner of Loudon, many of which are located in conservation lands ¹⁷

Identified Water Resource Priorities

Past Town reports have named the following water resources as being particularly important to the Town: ^{28, 29}

- → Breem Jaggen Swamp
- → Sanborn Brook Swamp
- + Cranberry Ponds
- → Peat Bog

- → Hothole Pond
- **♦** Sanborn Pond
- → Clough Pond
- Crooked Pond
- + Bumfagon Brook
- → Bee Hole Brook
- → Academy Brook
- → Shaker Brook

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Loudon. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Loudon	Region
First Priority	Rivers and streams	Rivers and streams
Second Priority	Watersheds	Aquifers
Third Priority	Aquifers (tied)	Lakes and ponds
Fourth Priority	Designated prime wetlands (tied)	Designated prime wetlands
Fifth Priority	Lakes and ponds	Watersheds

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

- Loudon's ordinances need to be updated to address water resources specifically.
- + We need to protect the Soucook River and its watershed.



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 60% of the entire Town. The following table breaks down the components: $^{8, 20, 21, 22}$

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Bachelder Lot	Town	152
Bachelder easement	Town	35
Bachelder easement	Town	34
Bearhill Commons Lot	Town	18
Harvey Bergeron WMA easement	NH F&G	81
Clough Pond	NH F&G	1
Crooked Pond	NH DOT	1
Flagg Lot	Town	20
Esther Greene easement	Town	98
Hoit Road Marsh WMA	NH F&G	219
Loudon Grade School Fields	Town	3
Loudon Recreation Fields	Town	21
Maxfield Lot	Town	181
William Maxfield Monument	Town	1
Richard Merril easement	Town	273
Joseph Merril easement	Town	189
Oak Hill Fire Tower Land	Town	2
Oak Hill Fire Tower Right of Way	Town	6
Osborne WMA easement	NH F&G	738
Prescott easement	Town	113
Row - Access Clough Pond - Berry	NH F&G	1
Sanborn Family Trust easement	Town	332
Soucook River State Forest	Town	50
Thunberg easement	Town	25
Town Beach	Town	1

Bruce Yeaton easement	Town	129
Current Use		15,175
TOTAL ACREAGE PROTECTED		17,899

In 1998, Loudon did not support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Past Town reports have named the following land and forestry resources as being particularly important to the Town: ²⁹

- 2 Hoit Road Marsh Wildlife Management Area
- 2 Soucook River State Forest

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Loudon. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Loudon	Region
First Priority	Agricultural land	Open space
Second Priority	Town parks and forests	Agricultural land
Third Priority	Open spaces (tied)	Conservation easements
Fourth Priority	State parks and forests (tied)	Town parks and forests
Fifth Priority	None selected	Deeded conservation lands

Half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. ³¹

Specific comments 31

2 Additional protection should be sought for prime agricultural land.





Historical and Cultural Resources

National Register of Historic Places

Loudon does not have any sites located on the National Register at this time. A large effort is required on the part of individuals to promote places of historic importance through applications to the National Historic Register. ²⁴

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

One of the most well-known historical sites in New Hampshire is the Canterbury Shaker Village. While Loudon shares this historical site with Canterbury, the actual marker is located off of Route 106 at the terminus of Shaker Road in Loudon. The Shakers built the attractive utopian Canterbury Shaker Village in 1792 based on their high moral standards. The Shakers became renown for their craftsmanship, agricultural efficiency, and domestic skill. The Shaker Village was listed on the National Register in 1975 under the Town of Canterbury. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- The Loudon Town Hall was erected in 1779 and served as the first church for the Town as well. In 1782, New Hampshire's first Shaker sermon was given in this building.
- The Sanborn Farm has been owned and operated by the same family for over a century. Their water-powered sawmill has been in operating condition since pre-revolutionary times.
- Five stone houses made from cut Loudon stone were built in 1830, and four of them still stand today.
- An old Native American trail travels along the Soucook River in Loudon. This trail once connected the Concord area with Alton and Lake Winnepesaukee.
- At least a dozen small district schools existed in Loudon in the 19th century.
- Old tanning pits used in processing leather goods in the late 1700's can still be found off of Pleasant Street.
- The original Town post office is the oldest standing structure in Loudon. The structure also served as Abraham Batchelder's store.
- Various old mill sites dot Loudon's countryside. These mills played a major part in the Town's early development. Some remains of these structures can be seen along the Soucook River.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. There is no evidence nor records of any covered bridges being located in Loudon. ²⁶

Cemeteries

As do many other small Central Region towns, Loudon has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link. Loudon has many Town and private cemeteries. A few of them are listed below: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Mount Hope Cemetery	Town	
Moore Cemetery	Town	
Loudon Center Cemetery	Town	
Maxfield Cemetery	Town	
Lovering Cemetery	Town	
Loudon Ridge Cemetery	Town	

Identified Historical Resource Priorities

Past Town reports have named the following general and specific historical and cultural resources as being particularly important to the Town: ²⁹

- Town pound
- William A. Maxfield Monument

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Loudon. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Loudon	Region
First Priority	Cultural interest sites (tied)	Cemeteries
Second Priority	Museums (tied)	Cultural interest sites
Third Priority	Cemeteries	Covered bridges
Fourth Priority	Mill sites	National Register of Historic Places
Fifth Priority	None selected	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations adequately protect their historical and cultural resources. ³¹

Specific comments 31

None



B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Loudon since the 1930's and recorded in the NHI program's database. ²⁷

The plant species Canadian Mountain-Rice (Oryzopsis candensis) is listed as endangered in the State of New Hampshire. The only listed sightings of this rare plant (both in the Granite State and in Loudon) are historical.

The invertebrate mollusk Brook Floater (Alasmidonta varicosa) is listed in the State as endangered. One occurrence in Loudon within the last 20 years has been recorded.

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been sighted in Loudon only once within the last 20 years.

A Great Blue Heron (Ardea herodias) rookery is located in Loudon. This species of bird is not listed as threatened or endangered as there are 33 locations reported within New Hampshire.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Loudon: 15, 18 19

A large riparian corridor is located along the Soucook River which forms in northern Loudon and flows in a southerly direction and eventually forms the border between Concord and Pembroke. The wild and undeveloped nature of the Soucook offers prime habitat and migration opportunities.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural community has been identified in Loudon: ¹⁸

A large, mostly continuous area of conservation land is located in the northeastern corner of Loudon. The area contains a pond, several wetlands and streams and very few roads.

Identified Ecological Resource Priorities

Past Town reports have named the following ecological resources as being particularly important to the Town. ²⁸

- B Breem Jaggen Swamp
- B Blue Heron Nesting areas
- B Sanborn Pond
- B Hoit Road Marsh wildlife habitat
- B Cranberry Bogs
- B Peat Bog
- B Hothole Pond
- B Soucook River State Forest
- B Crooked Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Loudon. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Loudon	Region
First Priority	Bio-diversity	Scenic vistas
Second Priority	Greenway corridors	Plant/tree communities (tied w/3rd)
Third Priority	None selected	Greenway corridors (tied w/2nd)
Fourth Priority	None selected	Riparian corridors
Fifth Priority	None selected	Biological diversity

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. 31

Specific comments 31

B None

1 Geologic Resources

Surficial Geology

Glacial drift left over from the Pleistocene Period underlies most of Loudon. Stratified drift outwash plains lie beside the Soucook River and are accompanied by sand pits scattered in kames and kame terraces. Organic deposits are found in various wetland areas. 12, 14

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Clough Hill	800'
Bear Hill	740'
Oak Hill	920'

Bedrock Geology

The Littleton Formation composed of undifferentiated schists and gneisses dominates Loudon's bedrock and underlies approximately 80% of the Town. Two small patches of Binary Granite (Concord Granite) lies in southern Loudon, one south of Hothole Pond and one just west of Route 106. Grey gneiss is found in the north, and isolated deposits of pegmatite dot the Town. 12, 14

Identified Geological Resource Priorities

Past Town reports have named the following geologic resources as being particularly important to the Town: ²⁸

- 1 old mica mine
- 1 old gold mine
- 1 old silver mine
- 1 old quarry sites
- 1 gravel deposits

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Loudon. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Loudon	Region
First Priority	Soils identification	Mountains and hills
Second Priority	Sand and gravel deposits (tied)	Soils identification
Third Priority	Gorges (tied)	Sand and gravel deposits
Fourth Priority	Mountains and hills	Bluffs
Fifth Priority	Mining sites	Gorges

The majority of respondents felt that the Town's ordinances and regulations adequately protect their geologic resources. ³¹

Specific comments 31

1 None



X Recreational Resources

A variety of recreational opportunities and resources exist in Loudon that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Loudon Recreation Field	Town	at Intersection of Routes 106 & 129	21 acres
Loudon Country Club	private	off Route 106, north of its intersection with Shaker Road	84 acres
Cascade Park	Private	off Route 106	60 acres
Loudon Grade School	Town	School Street	3 acres
Clough Pond boat access	State	Clough Pond Road	1 acre
Hoit Road Marsh Wildlife Management	State	at the Concord city line, off Hoit Road	64 acres
Osborne Wildlife Management	State		370 acres
Oak Hill State Forest Tower	State	west of Oak Hill Road	2 acres
Soucook River State Forest	State	west of Route 106 near Concord city line	50 acres
NH International Speedway	private	where Route 106 enters Canterbury	438 acres
Crooked Pond boat access	State	off Route 129	1 acre

I	Town Beach	Town	Clough Pond Road	1 acre	Ì
	Town Beach	1 0 W 11	Clough I ona Road	1 acre	

Identified Recreational Resource Priorities

Past Town reports have named the following recreational resources as being particularly important to the Town: ²⁸

- **★** Soucook River State Forest
- **★** Hoit Road Marsh
- X Cascade Park
- **X** the Speedway
- **X** the Town swimming beach
- X Crooked Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Loudon. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Loudon	Region	
First Priority	Picnic areas and playgrounds	Recreational trails	
Second Priority	Outdoor sporting fields	Canoe/boat access	
Third Priority	Recreational trails (tied)	Outdoor sporting fields	
Fourth Priority	Beach access (tied)	Picnic areas and playgrounds	



Fifth Priority	Canoe/boat access	Beach access
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Specific comments 31

X None

Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

None listed

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Loudon has established a Conservation Commission.⁸

Conservation Commission

Recent activities of the Conservation Commission include: monitoring NHIS parking facilities and wetland mitigations; stabilizing the Town beach and a few other areas; monitoring conservation lands and lands held under conservation easements; and being active in planning issues where the environment is threatened

<u>Historical</u> <u>Society</u>

A private Historical Society also exists to help protect Loudon's heritage. In 1996, the society moved into their permanent museum located in the Community Building at the back of the Town Office Building. In addition, the Historical Society is helping Loudon compile a Town History.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Loudon's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

developing easement areas around the Soucook River and watershed

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

mapping of all prime wetlands and major streams to develop protective ordinances

Essential Factors to Loudon's "Quality of Life"

- M abundant open space both in fields and forests as well as streams and ponds
- M economic development that co-exists with the environment by organized zoning

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Loudon Zoning Ordinance, 1995
- 7 Town Officials/Employees, 1998
- 8 Loudon Town Annual Report, 1996
- 9 Loudon Site Plan Review Regulations, 1990
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Loudon Master Plan: Land Use Element, 1992
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Loudon Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

PEMBROKE

Ahout Pembroke	
Member of CNHRPC	✓
Surveys Mailed	15
Surveys Received for Tallying	3
REPP Meeting Participation	✓
Profile Review & Comment by	*

Historical Profile

In 172,8 the legislature of the colony of Massachusetts granted an area of land called Suncook to the survivor of Captain John Lovell's band of "Indian Fighters". One year earlier, however, the Masonian had granted the same land to the Town of Bow. This kind of conflict was common in the early settlement of New Hampshire and in the case of Suncook, the conflict was settled amicably. The English King gave the land to the New Hampshire grantees with the provisions that those who had already settled the lands in question would not be disturbed. In 1759, Governor Wentworth formally named and defined Pembroke. Early industries in Pembroke included brick making and cotton milling. In 1818, the Pembroke Academy was established and has remained a important part of Pembroke's heritage through present day. ¹

Present-Day Profile

The area of Pembroke is 14,528 acres, or 22.7 square miles. The Town comprises 2.8% of the CNHRPC area. ²

Over the last twenty-seven years, Pembroke's population has grown by 58% while the number of housing units has increased by 42%: ^{3,4,5}

GROWTH	Population	<u>Net</u>	Change %	Housing Units	<u>Net C</u> #	Change %	
1970 (US Census)	4261	na	na	897	na	na	
1980 (US Census)	4861	+ 600	+14.1	1114	+ 217	+ 24.2	
1990 (US Census)	6561	+ 1700	+ 35.0	1221	+ 107	+ 9.6	
1997 Population & 1996 Housing (NHOSP)	6724	+ 163	+ 2.5	1275	+ 54	+ 4.4	
TOTAL CHANGE FROM 1970 - 1997		+ 2463	+ 57.8%		+ 378	+ 42.1%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Medium Density - Residential	Cluster Development Regulations
Rural/Agricultural - Residential	Shoreland Protection Ordinance
Business/Residential	Aquifer Development Ordinance
Central Business	Floodplain Development Ordinance
Commercial/Light Industrial	Excavation Regulations
Limited Office	Wetland Ordinance
Architectural Design (Overlay)	
Floodplain Development (Overlay)	
Home Business (Overlay)	
Shoreland Protection (Overlay)	
Wetlands (Overlay)	
Aquifer Conservation (Overlay)	

Non-regulatory measures for protecting Pembroke's resources include the following: ^{7,8,9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Objectives (1993)	
Resources (1993)	
Population & Housing (1993)	
Economic Factors (1993)	
Town Services & Facilities (1993)	
Transportation (1993)	
Schools (1993)	

TOWN RESOURCES



Water Resources

Water Supplies

Pembroke's public water supply system is fed through well sites on the Soucook and Suncook Rivers. The site on the Soucook River contains two wells, each pumping approximately 600 gallons per minute. The site on the Suncook River also contains two wells, each pumping about 300 gallons per minute. The second wells are used to maintain pressure in the water system.

Between 1983 and 1997, the NHDES has issued 95 well permits. The majority of these new private wells have been clustered on Fourth Range Road (15), Cross Country Road (11) Beacon Road (10), and Church Road (9). These new well sites have been mapped by NHDES. ¹⁰

Interestingly, only one pond of note exists within Town. Bragfield Pond is located off of Brickett Hill Road. This 5-acre pond is managed by the Conservation Commission as a wildlife area.

Rivers 11, 12, 13, 14

The Soucook River forms the Western border of Pembroke separating it from Concord. This undeveloped River flows from Loudon to the north and travels the length between Concord and Pembroke, where it enters the Merrimack at the northern tip of Bow.

The Merrimack River separates Pembroke from Bow and forms Pembroke's southern border. The Merrimack River is the largest river in the area and has served a key purpose in the early industries of Pembroke.

The Suncook River forms the border between Pembroke and Allenstown. The river runs the length between the two towns and makes its way into the Merrimack. The Suncook is historically significant, responsible for the settling of and industries at Suncook Village which Pembroke shares with Allenstown.

French's Brook flows 2.5 miles into the Soucook River from Plausawa Hill.

Ames Brook begins in the northeastern corner of Town, and travels downhill over an elevation of 400' feet to join with the Suncook.

Pettingill Brook connects the majority of Pembroke's few wetlands through the geographic center of Town and converges with the Suncook.

Hartford Brook travels a relatively short distance parallel to Fourth Range Road and also empties into the Suncook River.

Hydric Soils

Out of the total land acreage of Pembroke (14,528), 13.7% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1571	10.8
Very Poorly Drained - organic base	200	1.4
Very Poorly Drained - mineral base	216	1.5
Marsh	0	0
TOTALS	1987	13.7

Watersheds

Although the surface water features within Pembroke's political boundaries are limited, the Town is 2/3 bordered by large Rivers. Because of this unique hydrologic advantage, the Town is half encompassed within the Soucook and half within the Suncook watersheds. ¹⁰

Aquifers

A large aquifer exists along the Soucook River in Pembroke. This aquifer is mostly coarse-grain stratified drift and coarse-grain overlaying fine-grain stratified drift. Another large aquifer exists along the Merrimack in Pembroke. This aquifer contains coarse-grain and coarse-grain overlaying fine-grain stratified drift. This aquifer also contains portions of fine-grain stratified drift. A third aquifer exists along the Suncook in eastern Pembroke. This aquifer is mostly coarse-grain overlaying fine-grain stratified drift with a small portion being fine-grain stratified drift. The benefit of these numerous large aquifers should ensure an important future water supply. ¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. The wetlands in Pembroke are fairly small in size and spread throughout all of Pembroke. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- → Merrimack River
- ♦ Soucook River
- → Suncook River
- ✦ Pond on Academy Street
- → Canal
- → Main Street Dam
- → Wetlands

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pembroke. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pembroke	Region
First Priority	Rivers and streams	Rivers and streams
Second Priority	Aquifers Aquifers	
Third Priority	Watersheds	Lakes and ponds
Fourth Priority	Other wetlands	Designated prime wetlands
Fifth Priority	Shorelands	Watersheds

All of the respondents felt that the Town's ordinances and regulations adequately protect their water resources. ³¹

Specific comments included: 31

+ no additional comments were given



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 65% of the entire Town. The following table breaks down the components: 8, 20, 21, 22

CONSERVATION LANDS & CURRENT USE	Held By	Acres
Anderson Lot	Town	27
Bow Lane Conservation Land	Town	1
Bragfield Pond Conservation Area	Town	27
Concord Wellfield	Town	50
Keniston easement	Town	3
Mason Avenue Conservation Land	Town	11
Merrimack River Conservation Land	Town	3
Pembroke Water Works	Town	26
Scripture easement	Town	10
Shuett Conservation Area	Town	7

Suncook River Access	Town	3
Town Forest - Butterfield	Town	28
Town Land	Town	7
Veterans Park	Town	1
White Sands Road Conservation Land	Town	1
White Sands Conservation Area	Town	33
Whittemore Town Forest	Town	135
Current Use		9089
TOTAL ACREAGE PROTECTED		9462

In 1998, Pembroke did not support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 Town lands
- 2 Town Forest
- Whittemore Forest
- 2 old growth trees
- 2 conservation lands
- 2 open spaces
- 2 State Parks
- 2 agricultural lands
- 2 floodplains

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pembroke. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pembroke	Region
First Priority	Conservation easements	Open space
Second Priority	Town parks and forests	Agricultural land

Third Priority	Open space	Conservation easements
Fourth Priority	Deeded conservation land	Town parks and forests
Fifth Priority	none selected	Deeded conservation lands

The majority of the respondents felt that adequately protect their land and forestry



the Town's ordinances and regulations

Specific comments 31

2 no additional comments were provided



Historical and Cultural Resources

National Register of Historic Places

Pembroke has one exemplary site located on the National Register which was nominated and listed in the 1980's. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1,24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Pembroke Mill (Emerson Mill)	9/85	100 Main Street	

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

One of the sites with the most historical significance is the site of the first meeting house and church. The original building was built in 1733 and served as the first meeting house in the Suncook Grant. The meeting house also came to serve as the first church and helped foster early Christian ideals. The building has been moved, rebuilt, and enlarged several times. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

Brickyards played an important role in Pembroke's early prosperity. These large mills were located primarily along the Merrimack. Clay was taken from the banks of the Merrimack to make the bricks. Only the clay banks and pieces of brick remain at these sites.

- A heartfelt monument, honoring the memory of schoolgirl Josie Langmaid who was savagely murdered almost a century ago, has been erected on Academy Road.
- Several old mills along the Soucook and Suncook long served the community. During both the World Wars some of these mills were utilized to make needed materials and today many are still used for a variety of purposes.
- The old Suncook Glass Works operated during the mid 1800's as one of the few glass mills around. Located between the Suncook River and Glass Street, this mill used sand shipped in from Massachusetts.
- Some uniquely old homesteads reside in Pembroke. One of the oldest is Doyen's Log Cabin which dates to 1728.
- Pembroke Academy was constructed in 1818 and has served as Pembroke's public school since then. Many of the original buildings have been destroyed over the years and new ones built in their stead, but overall the complex is still a good example of early architectures.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. There are no records of any covered bridges built in Pembroke. ²⁶

Cemeteries

As do many other small Central Region towns, Pembroke has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Pembroke Street Cemetery	Town	Pembroke Street
Buck Street Cemetery	Town	Buck Street
Evergreen Cemetery	Town	
Pembroke Hill Cemetery	Town	
North Pembroke Cemetery	Town	
North Pembroke Cemetery	Town	
Abbott Cemetery	Town	
Button Hole Square Cemetery		

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- Town pound
- a cemeteries
- along Pembroke Street
- along Merrimack River
- shore of the Merrimack
- Town Clock
- Downtown area
- Conference Center
- Langmaid memorial
- Emerson mill
- Glass Works
- Water works
- stone walls
- and Buck Street school house
- and old congregational church site
- one-room schoolhouse on Pembroke Street

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pembroke. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pembroke	Region
First Priority	Cemeteries	Cemeteries
Second Priority	Nation Register of Historic Places	Cultural interest sites
Third Priority	Cultural interest sites	Covered bridges
Fourth Priority	Town pond	National Register of Historic Places



Fifth Priority	none selected	Archaeological sites
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All of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

Need recognition of historic places in zoning

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Pembroke since the 1930's as well as one outstanding natural community and recorded NHI program's database. ²⁷

The Golden-Heather is a rare plant species threatened in New Hampshire, but not federally or globally. There has been one reported sighting of this plant in Pembroke and only 10 other sightings within the state of New Hampshire.

Another rare plant species seen in Pembroke is the Wild Lupine. This plant is also threatened in the State, but not federally or globally. There have been several reported sightings of this plant in Pembroke over the last 20 years. Of particular significance, the Wild Lupine is the sole diet of the federally and globally endangered Karner Blue butterfly.

There has been one reported sighting in Pembroke in the last 20 years of a bird species which is threatened federally and globally and is endangered in the State of New Hampshire. This rare and exquisite bird is the Bald Eagle. While there have been only 10 reported sightings in New Hampshire, a large and successful effort has been underway for several years to help bring this species of bird back from the brink of extinction.

There are several rare species of insects in Pembroke and several are associated with a unique habitat know as a Pitch Pine/Scrub Oak Barren. These insects are: Geometrid, two types of Noctoid Moth, Apentesis carlotta, Barrens Xylotype, Pine Barrens Zanclognatha, and the Pine Sphinx. Of all of these species only one is listed as threatened in the state and that is the Pine Barrens Zanclognatha Moth.

A prime example of a New England Pitch Pine/Scrub Oak Barren is located in Pembroke. This unique type of natural community is home to many rare species of plants and insects and is in itself, a rare find in New England.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Pembroke: ^{15, 18 19}

Riparian corridors exist along each of the three rivers that mark Pembroke's borders. These corridors, when adequately preserved and protected form development, are unique habitats which serve to harbor to many species of plants, animals and insects.

A few large utility line corridors travel through Pembroke in north-south direction and also in an east-west direction. These corridors can act as protected travel corridors for many different animal species and also offer particular plant species for food or shelter.

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Lupine growth area
- B White Sands
- B orchards
- B various animals
- B floodplains
- B deeryards

Survey Findings

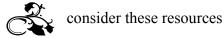
The following table documents the general resource priorities of those who returned surveys from the Town of Pembroke. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pembroke	Region
First Priority	Plant/tree communities	Scenic vistas
Second Priority	Riparian corridors	Plant/tree communities (tied w/3rd)
Third Priority	Animal communities	Greenway corridors (tied w/2nd)
Fourth Priority	Bio-diversity	Riparian corridors
Fifth Priority	None selected	Bio-diversity

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

B Planning board needs to



1 Geologic Resources

Surficial Geology

Various stratified drift sand and gravel deposits lie along each of the three rivers that border Pembroke. Flat floodplain areas of the Merrimack, Soucook, and Suncook Rivers, typically agricultural soils, border two-thirds of the Town. A number of kames, kame terraces, deltas, and

outwash plains exist in Pembroke as evidence of the glaciation retreat.

The elevation differences within the Town are wide and varied, between 195' to 1000' above sea level, although only two specific hills have been named: 14, 28

MOUNTAINS AND HILLS	Elevation
Pembroke Hill	680'
Plausawa Hill	1000'

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 Pembroke Hill
- 1 glacial erratics of 3rd Range Road
- 1 sand & gravel pits of Pembroke Street
- 1 Porcupine Caves
- 1 Plausawa Hill
- 1 clay beds
- 1 mining sites off Route 106 & Route 3

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pembroke. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pembroke	Region
First Priority	Sand and gravel deposits	Mountains and hills
Second Priority	Eskers, kames & drumlins	Soils identification
Third Priority	Soils identification	Sand and gravel deposits
Fourth Priority	Bluffs	Bluffs
Fifth Priority	Gorges	Gorges

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources. ³¹

Specific comments 31

1 no additional comments were provided

X Recreational Resources

A variety of recreational opportunities and resources exist in Pembroke that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Community Center	public		
Pembroke Elementary School fields	public		
Pembroke Hill School Fields	public		
Pembroke Academy	public	off of Route 3	
Memorial Field	public	30 Memorial Field	30 acres
Pembroke Place School	public		
Bragfield Pond Conservation Area	public	502-516 3rd Range Road	27 acres
Town Forest	public	305-325 Brickett Hill Road	28 acres
Plausawa Golf Course	private		
White Sands	public	White Sands Road	33 acres
Whittemore Forest	public	501-623 Kimball Road	135 acres

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: 18

- **X** White Sands
- **X** Town Forest
- **X** Whittemore town forest
- **★** Memorial Field and boat access
- **X** Bragfield pond
- **x** playgrounds
- **x** outdoor sporting fields
- **X** beach access
- X Victory Park
- **★** Four Girls Memorial Library



Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pembroke. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pembroke	Region
First Priority	Picnic areas	Recreational trails
Second Priority	Canoe/boat access	Canoe/boat access
Third Priority	Outdoor sporting fields	Outdoor sporting fields
Fourth Priority	Recreational trails	Picnic areas and playgrounds
Fifth Priority	None selected	Beach access

Specific comments 31

x no other comments were provided



****** Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

- Plausawa Valley Country Club
- Suncook Valley railroad bed
- ✗ Sanitorium site near top of Center Road
- Bambam Bridge area

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural, historical, and recreational resources, Pembroke has established both a Conservation Commission and a Recreation Commission.

Conservation Commission

Recent activities of the Conservation Commission include: preserving the White Sands beach area; clearing and maintaining trails throughout the Whittemore and Town Forest along with mapping and placing signage along the trails; identified the natural resources located on Townowned lands; helping with the Soucook River Watershed Study; and identifying parcels of land which may be purchased and preserved as conservation land.

Recreation Commission

A few of the functions of the Recreation Commission include: overseeing the maintenance of Gamelin Field; helping coordinate Town events like Old Home Day; helping stabilize portions of the Merrimack River bank; plus many more. One unique program held by the Commission is the summer recreation program. This two-dollar-a-day, five-week program for children entering grades 2-8 immerses children in safe and fun activities and weekly field trips.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Pembroke's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ directed the Almost Home Day 5K Road Race
- ☑ organized a canoe trip up the Merrimack River

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

road race

Essential Factors to Pembroke's "Quality of Life"

M an approachable government

M community spirit

M decent public facilities

M having 3 rivers form the Town's boundaries

M the Town's rural setting compounded with its proximity to Concord and

Manchester

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Pembroke Zoning Ordinance, 1996
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- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Pembroke Master Plan: Land Use Element, 1993
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Pembroke Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

PITTSFIELD

Ahout Pittsfield	
Member of CNHRPC	
Surveys Mailed	13
Surveys Received for	2
REPP Meeting	
Profile Review &	

Historical Profile

Pittsfield owes its name to William Pitt, Prime Minister of England and a strong supporter of colonial rights in the pre-revolutionary period. Pittsfield was granted as a part of Chichester in 1727, but it was not until 1781 that Pittsfield was incorporated as a separate Town. The Suncook River helped to bring industry to the Town, and much of Pittsfield's history is marked by mills and manufacturing. In the mid 1800's, Pittsfield was known for its shoe making factories. Like many other industrial towns in New Hampshire, as industry moved away so did much of Pittsfield's prosperity. Despite these setbacks, Pittsfield remains well-loved by its residents, and it looks at a bright future fostered by a strong community spirit.1

Present-Day Profile

The area of Pittsfield is 15,488 acres, or 24.2 square miles. The Town comprises 3.0% of the CNHRPC area. 2

Over the last twenty-seven years, Pittsfield's population has grown by 56% while the number of housing units has increased by 81%: 3, 4, 5

GROWTH	Populatio n	Net #	t Change %	Housing	Net #	Change %	
1970 (US Census)	2517	na	na	892	na	na	
1980 (US Census)	2889	+ 372	+ 14.8	1197	+ 305	+ 34.2	
1990 (US Census)	3701	+812	+ 28.1	1527	+ 330	+ 27.6	
1997 Population & 1996 Housing (NHOSP)	3930	+ 229	+ 6.2	1617	+90	+ 5.9	
TOTAL CHANGE FROM 1970 - 1997		+ 1413	+ 56.1%		+ 725	+ 81.3%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: 6

Town Zoning Districts Ordinances

Town-Adopted Resource & Conservation

Ordinances	
Rural	Excavation Regulations - Under Consideration
Suburban	Historic District Ordinance
Urban	
Commercial	
Light Industrial/Commercial	
Historic	

Non-regulatory measures for protecting Pittsfield's resources include the following: 6,7, 8, 9

Town Master Plan Elements	Special Conservation Plans, Reports and Studies
Goals and Objectives Element (1988)	
Community Facilities Element (1988)	

In 1999, the Pittsfield Master Plan Committee will have completed an updated Master Plan after two years of diligent volunteer work.

TOWN RESOURCES



Water Resources

Water Supplies

Berry Pond serves as the municipal water supply for the Town of Pittsfield. This 33-acre body of water is a natural pond that has been raised by masonry and compacted earth. It lies at an altitude of 886 feet, and has an average depth of 15 feet. The pond lies within the Suncook River watershed

One hundred six private well permits have been issued in the Town, most of them along Route 107 (12) and along Wildwood Drive (9). Molly Lane and Tilton Hill Road also house 13 private wells collectively. Public wells at Goose Camp on Wild Goose Road, at the Kaddyshack Restaurant at the intersection of Route 107 and 28, and at the Pittsfield Aquaduct Company along Route 107, provide water for 250, 125 and 1450 people respectively. Other public wells at the Bearhill School, Leavitt Road, and the former Huckins Chevrolet provide for a population of 106. These wells have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13,

Berry Pond is a 33-acre pond that has an average depth of 15 feet. It is located by Catamount Mountain, between Route 107, Governor's Road, and Berry Pond Road and serves as the municipal water supply.

Blake Pond is 14 acres in area. It serves as a tributary to Gulf Brook, and is a part of the Suncook River system.

Eaton Pond is a natural pond that lies within the Suncook watershed. It is approximately 17 acres in size with an average depth of eight feet.

Whites Pond is an artificial pond that is on average seven feet deep and has an area of 36 acres.

Wild Goose Pond is Pittsfield's largest pond with a 78-acre area and a maximum sounded depth of 20 feet.

Other small ponds comprise an additional 11 acres within Town.

Rivers 11, 12, 13, 14

The Suncook River runs through the center of Pittsfield and is the Town's main waterway. It flows southwest from the Pittsfield/Barnstead border, and marks a portion of the southwestern boundary of the Town. For decades, the Suncook River has provided energy to power Pittsfield's industrial factories and mills. While currently serving as an attractive place of recreation, the River also assists in powering the turbine at the Suncook Leather Factory.

Brooks 11, 12, 13, 14

Berry Pond Brook serves as an overflow for Berry Pond, Pittsfield's water supply. It flows into Whites Pond, through the swimming area, and into the Suncook River. Sanborn Brook is located in Pittsfield's southwestern corner, where it enters Chichester.

Gulf Brook flows from Blake Pond into Epsom.

Shingle Mill Brook connects a series of small ponds in Pittsfield's northeastern corner.

Kelley Brook crosses into Pittsfield from Barnstead. It flows between Lily Lake and the Suncook River.

Hydric Soils

Out of the total land acreage of Pittsfield (15,488), 11.2% is comprised of hydric soils: 14,33

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1551	10.0
Very Poorly Drained - organic base	176	1.2
Very Poorly Drained - mineral base	0	0
Marsh	0	0
TOTALS	1727	11.2

Watersheds 10

Approximately one quarter of the Town of Pittsfield lies within the Upper Suncook Watershed, while close to three quarters of the Town lie in the Lower Suncook River watershed. A small eastern section of the Town falls inside the Piscataqua watershed.

Aquifers 16

There are no significant aquifers underlying Pittsfield, but two small pockets exist under the Suncook River, and one lies beneath Eaton Pond.

Wetlands 17

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Most areas of mapped wetlands co-occur with ponds. Pittsfield has recently completed an inventory of their wetland areas in conjunction with students from the University of New Hampshire. ¹⁷

Identified Water Resource Priorities

Town officials and citizens have named the following water resources as being important to the Town: ¹⁸

- → wetlands along Loudon Road
- → aquifers
- → bogs
- → the Berry Pond Reservoir
- the Suncook River
- → Wild Goose Pond

→ Blake Pond

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pittsfield. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pittsfield	Region
First Priority	Lakes and ponds	Rivers and streams
Second Priority	Public water supplies	Aquifers
Third Priority	Rivers and streams	Lakes and ponds
Fourth Priority	Aquifers	Designated prime wetlands
Fifth Priority	No response	Watersheds

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

★ Enact appropriate ordinances



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 72% of the entire Town. The following table breaks down the components: 8, 20, 21, 22

CONSERVATION LANDS & CURRENT USE	Held By	Acres
Clough Road Lot	Town	112
Drake/Mayo	Town	27
Dustin Barker Town Forest	Town	42
Dustin Park	Town	1
Forest B Argue Pool	Town	1
Merrill Lot (Loudon Farms)	private	189
Osborne Lot (Loudon Farms)	NH F&G	738

Pittsfield Aqueduct Company Land	private	223
Pittsfield Dam	NH WRC	1
Sargent Town Forest	Town	5
Town of Pittsfield Land	Town	86
Current Use		9704
TOTAL ACREAGE PROTECTED		11129

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being important to the Town: ¹⁸

- 2 Apple View Orchard on Upper City Road, 1500' west of Norris Road
- 2 Marston Farm on Webster Mills Road, just east of the Suncook River Bridge
- 2 Sargent Town Forest
- 2 Lane Hartwell land
- 2 Upper City farmland
- 2 Tan Road land
- 2 Other Town owned lands that have not yet been identified as conservation land.

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pittsfield. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pittsfield	Region
First Priority	Agricultural land (tied w/2nd)	Open space
Second Priority	Town parks and forests (tied)	Agricultural land
Third Priority	Conservation easements (tied w/4th)	Conservation easements
Fourth Priority	Deeded conservation lands (tied)	Town parks and forests
Fifth Priority	Open space	Deeded conservation lands

Half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. ³¹

Specific comments 31

2 Enact appropriate ordinances and develop program to meet goals.



Historical and Cultural Resources

National Register of Historic Places

Pittsfield has one exemplary site located on the National Register. The site was nominated and listed during the 1980's. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Pittsfield Center Historic District	12/80	NH 28 and NH 107	Architectural styles of buildings

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Pittsfield currently has no sites listed with the New Hampshire Division of Historic Resources.

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- The first Pittsfield School House is said to be the oldest in New England. Erected in 1777 this single frame building once stood opposite a Quaker burial ground near the top of Catamount Mountain. Since then the school house has been moved several times.
- The first mill site on Catamount Mountain was built in the late 18th century.
- One of the first mills lies near Wild Goose Pond. The mill is in ruins and only a cellar hole and a foundation remain.
- An old mica mine near Webster's Mill, which operated in the 1800's, serves as a reminder to this early form of industry.
- Pittsfield Center and Kelly's Corner (now in Chichester) are two sites that were used by early Native Americans. Pittsfield Center once had a wall part way around it, and it is believed that it may have served as a burial ground. Kelly's Corner, while it still resided within Pittsfield before the boundaries were redrawn, may have been a Native American campsite.
- The Pittsfield Historical Trail is visitors through Pittsfield's includes 32 sites. Among them Meeting House and Old Meeting House Cemetery, the Old Stage Depot, the Tuttle

Mansion, the Drake House, the Berry House, he Washington House, the A P J Tenny House, the Cotton Mill, and Mary's Bridge.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Pittsfield no longer has standing covered bridges, two once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Mary's	Unk.	1906
Barnstead	1883	1937

Cemeteries

As do many other small towns in Central New Hampshire, Pittsfield has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link. Forty-four cemeteries are scattered throughout Pittsfield: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Old Meeting House Cemetery	Town	off South Main Street
Floral Park Cemetery		High Street
James Cemetery		Ingalls Road
Ring Cemetery		Ring Road
Mt. Calvery Cemetery	Cath Diocese	Norris Road
Green Cemetery		Upper City Road
Mansfield-Potter Cemetery		Upper City Road, east of Green Cemetery
Drake-Eaton Cemetery	Town	Norris Road, by its intersection with Eaton Road
Osborn Cemetery		Siel Road
Blake Cemetery		East of the Siel Road and Daroska Road intersection
Brown Cemetery		White Road
Shaw Cemetery		Range Road, just south of the Barnstead town line
Marston Cemetery		Webster Mills Road
Moody Cemetery		Webster Mills Road, just north of its intersection with New Orchard Road
Yeaton Cemetery		off Webster Mills Road, at its intersection with Locke Rd
McInnis Cemetery		south of Dowboro Road
Sargent Cemetery		off Dowboro Road, south of Quail Ridge Road

Brown-James Cemetery	Dowboro Road, at its intersection with Prescott Road	
Quaker Cemetery		
Drake Cemetery	south of Governor's Road	
Eaton Cemetery	at the intersection of Catamount and Governor's Roads	
Harvey Cemetery	Mountain Road	
Lane Cemetery	Mountain Road, east of Harvey Cemetery	
Knowlton Cemetery	Mountain Road, by its intersection with Berry Pond Road	
Hoague-Wesson Cemetery	Governor's Road	
Joshua Berry Cemetery		
Berry Family Cemetery	Catamount Road	
Merril Cemetery	off Catamount Drive	
Edgerly Cemetery	off Thompson Road, by its intersection with Johnson Road	
Pillsbury Cemetery		
Tucker Cemetery	Catamount Road, close to Northwood	
Locke-Watson Cemetery	Catamount Road, east of Tucker Cemetery	
Watson Cemetery	off Catamount Road, east of Watson	
Fogg-Joy Cemetery	Catamount Road, by the Northwood town line	
Brock Cemetery	North of Tilton Hill Road, along the Suncook River	
Goss Cemetery	off Tilton Hill Road	
Brock-Snell Cemetery	Blackery Road	
Tilton-Watson Cemetery	by the intersection of Tilton Hill Road and True Road	
True I Cemetery	off Tilton Hill Road	
True II Cemetery	off Tilton Hill Road, east of True I Cemetery	
Farmer Cemetery	off Clough Road, at its intersection with Thompson Road	
Towle Cemetery	Clough Road	
Davis-Greenleaf Cemetery	Jenness Pond Road, next to Northwood	

Identified Historical Resource Priorities

Town officials and citizens have named the following general and specific historical and cultural resources as being important to the Town: ¹⁸

Drake Field Park

- cemeteries
- Downtown area
- abandoned railroad bed
- Pittsfield's Historic Trail
- Scenic Theater
- Suncook Dam site
- Washington House land
- Native American cave on Catamount Mountain
- ¥ Yellow Block
- Old Pittsfield Fair Grounds

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pittsfield. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pittsfield	Region
First Priority	Cemeteries	Cemeteries
Second Priority	National Register of Historic Places	Cultural interest sites
Third Priority	Cultural interest sites	Covered bridges
Fourth Priority	Archaeological sites	National Register of Historic Places



Fifth Priority	No response	Archaeological sites
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The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

Enact appropriate ordinances. Also develop programs and purchase rights.

B Ecological Resources

NH Natural Heritage Inventory

One outstanding animal species has been located in Pittsfield since the 1930's and recorded in the NHI program's database. ²⁷

The Invertebrate mollusk Brook Floater (Alasmidonta Varicosa) is listed in New Hampshire as threatened. Only one occurrence in Pittsfield has been recorded within the last twenty years.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Pittsfield: ^{15, 18 19} The Suncook River corridor crosses into Pittsfield from Barnstead and runs southwest. In the southwest it forms the Chichester/Pittsfield boundary.

The arrival of the Concord & Montreal Railroad accompanied Pittsfield's industrial growth. The railroad corridor followed the contour of the Suncook River and was constructed to facilitate the transportation of goods to and from different Pittsfield industries. The railroad is no longer in use, but it is likely animal species use this corridor to facilitate their movement along the river.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Pittsfield: ¹⁸

The Osborne Wildlife Management area is overseen by the NH Fish and Game Department. The area offers a resource-rich environment for many animal species. The Fish and Game Department monitors the area during hunting season.

The Suncook River also supports a variety of plant and animal species.

Cox Pond is located next to the Suncook River just north of the Pittsfield/Chichester border. It has been noted as a place of heron nesting.

A Black Gum swamp was identified within the Town. This unusual community hosts a variety of species. In particular, old Black Gum trees are exceedingly rare.

Identified Ecological Resource Priorities

Town officials and citizens have named the following ecological resources as being important to the Town. 18

- B Scenic vistas
- B Scenic vistas from the top of Catamount Road
- B Black Gum Swamp
- B The Upper City Road vista
- B Whites Pond watershed

- B Suncook Valley Railroad Bed
- B Vista from the cemetery on Mountain Road
- B The fields and forests that side Tilton Hill Road and True Road
- B all major bodies of water in Pittsfield

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pittsfield. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pittsfield	Region
First Priority	Scenic vistas (tied)	Scenic vistas
Second Priority	Plant/tree communities (tied)	Plant/tree communities (tied w/3rd)
Third Priority	Greenway corridors	Greenway corridors (tied w/2nd)
Fourth Priority	No response	Riparian corridors
Fifth Priority	No response	Biological diversity

Half of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources, while half disagreed. ³¹

Specific comments 31

B Develop programs.



1 Geologic Resources

Surficial Geology 14

Pittsfield has a diverse geologic base. Desirable subsoil conditions prevail in the river valley basin, but soil conditions become less desirable as one moves further from the river. Mica mines, ledges, caves, and hills are found throughout the Town. Drumlins are located in the northwest, where boulders and clay subsoils predominate. Gravel deposits have been noted off of Tan Road, close to Blake Pond, and off South Main Street.

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Catamount Mountain	1334'
Jenness Hill	840'
Leavitt Hill	700'
Nudds Hill	853'

Tilton Hill	1000'

Bedrock Geology 14, 18

A Littleton Formation of schists and gneisses underlies most of Pittsfield. Pegmatite is scattered through out the region with a small concentration in the land north of Whites Pond. Grey gneiss lies in the bedrock in the Town's northwest territory, and the bedrock becomes shallow east of the Suncook River.

Identified Geological Resource Priorities

Town officials and citizens have named the following geologic resources as being important to the Town: ¹⁸

- 1 aquifers
- 1 fractures
- 1 Catamount Mountain
- 1 Mica mine by the Old Railroad Bed
- 1 the gravel deposits located off of South Main Street and Tan Road

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Pittsfield. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Pittsfield	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Soils identification	Soils identification
Third Priority	Sand and gravel deposits	Sand and gravel deposits
Fourth Priority	No response	Bluffs
Fifth Priority	No response	Gorges

Half of respondents felt that the Town's ordinances and regulations adequately protect their geologic resources, while half disagreed. ³¹

Specific comments 31

1 Improve the current ordinance,

inspect sites, and monitor activities

X Recreational Resources

A variety of recreational opportunities and resources exist in Pittsfield that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Type	Location	Acreage / Miles
Dustin Park	public	Village center	1 acre
Sargent Town Forest	public	off of Catamount Road	5 acres
Drake Field	public	Along the Suncook River, in the center of the town	7 acres
Glen & Glade Campground	private	on Jenness Pond	50 acres
Pittsfield Elementary School playground	public	Bow Street	
Pittsfield Middle High School grounds	public	Oneida Street	10 acres
Forrest B. Argue Pool	public	off of Catamount, near White's Pond	1 acre
Pittsfield Youth Baseball Field	public	off of Tilton Hill Road	59 acres
Tilton Hill Ballfield	private	Tilton Hill Road	59 acres
Osborne Wildlife Management	public	off Range Road	230 acres
Dustin Barker Town Forest	public	south off Loudon Road, west of Ingalls Road	41 acres
Eaton Pond	public	Route 107	
Suncook River	public	Route 107	
Jenness Pond Water Area	public	off Governor's Road	1 acre

Identified Recreational Resource Priorities

Town officials and citizens have named the following recreational resources as being important to the Town: 18

- **X** Boat Launch on Eaton Pond
- X The Hiking and Biking trails that follow the Old Rail Road Bed beside the Suncook River, accessible from Dowboro Road.
- **X** Boat Launch on Whites Pond
- **★** Boat Launch on Berry Pond
- **X** Community Center
- X The Clark Pond Swimming Area
- **★** Forest B Argue Town Pool

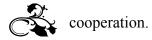
Survey Findings

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RESOURCE PRIORITIES	Pittsfield	Region
First Priority	Kiosks, shelters, and boardwalks	Recreational trails
Second Priority	Outdoor sporting fields	Canoe/boat access
Third Priority	Picnic areas and playgrounds	Outdoor sporting fields
Fourth Priority	Canoe/boat access	Picnic areas and playgrounds
Fifth Priority	No response	Beach access

Specific comments 31

★ We need greater local and state



***** Other Identified Resource Priorities

Town officials and citizens have named the following other resources as being important to the Town: 18

- * stone walls
- old growth trees
- * Academy Building
- Congregational Church
- Town Clock
- **★** Library
- * Police Station building
- scenic views
- open space
- * snowmobile

trails

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Pittsfield has revived their Conservation Commission and has instituted a Historic District Commission to oversee the research and maintenance of Pittsfield's historic downTown.

Natural Resources Committee and Conservation Commission

Recently Pittsfield reconstituted their Conservation Commission. This 3-member Commission will be meeting with the Natural Resources Committee to help preserve Pittsfield's natural resources. The Natural Resources Committee, comprised of around 10 members, has been conducting inventories of the various resources around Town and has been assisting the Master Plan Committee with the update of the Master Plan.

Historical Society

A private Historical Society also exists to help protect Pittsfield's heritage. The Society has recently been working on their "Wall of Fame," a project erected to recognize a collection of outstanding Pittsfield citizens and their contributions to the history of the Town. The Historical Society has also created a committee to oversee and maintain the Town's Historic Trail. In addition, they have completed a study which located and identified all of Pittsfield's cemeteries ³²

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Pittsfield's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

 \square (none listed)

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- proposal of a cemetery easement
- aquifer protection
- new subdivision regulations

Essential Factors to Pittsfield's "Quality of Life"

M open space

M citizen involvement

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Pittsfield Zoning Ordinance, 1998
- 7 Town Officials/Employees, 1998
- 8 Pittsfield Town Annual Report, 1997
- 9 Pittsfield Site Plan Review Regulations, 1998
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
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- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 (reserved)
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- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Pittsfield Survey Results, 1998
- 32 The Suncook Valley Sun, Wednesday, April 8, 1998
- 33 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

SALISBURY

Ahout Salishury	
Member of CNHRPC	✓
Surveys Mailed	16
Surveys Received for Tallying	2
REPP Meeting Participation	✓
Profile Review & Comment by	×

Historical Profile

Salisbury was originally granted in 1733 under the name of BakersTown. Although the Town was laid out on paper in 1738, no homesteads were built until 1752 when a Masonic grant claimed the region. In 1768, Governor Wentworth incorporated the Town and changed its name to Salisbury. During the early 1800s, the Fourth NH Turnpike by-passed the Town, making it an easily accessed agricultural community. Industries sprung up along Salisbury's rivers, and a few years later, the Town had three or four active trade centers. Unfortunately, the 1800s also brought less beneficial changes to Salisbury too. The new industrial Town of Franklin claimed Salisbury's land along the Merrimack River, and Salisbury lost many of its most successful industries. At about the same time, the "railroad craze" cut back on the amount of traffic traveling along the Fourth NH Turnpike, and Salisbury became the small, rural community that it is today. Despite its industrial losses, Salisbury is proud of its historical roots and its natural setting. Daniel Webster, the famous NH statesman, was native to the original Town of Salisbury, and the Town continues to link its own heritage to him and his family. Scenic stonewalls and old colonial houses spot the Town's country side, offering pleasant views of rural neighborhoods.

1, 14

Present-Day Profile

The area of Salisbury is 25,344 acres, or 39.6 square miles. The Town comprises 4.9% of the CNHRPC area. ²

Over the last twenty-seven years, Salisbury's population has grown by 91% while the number of housing units has increased by 52%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	<u>Net C</u> #	Change %	
1970 (US Census)	589	na	na	301	na	na	
1980 (US Census)	781	+ 192	+ 32.6	355	+ 54	+ 17.9	
1990 (US Census)	1061	+ 280	+ 35.9	422	+ 67	+ 18.9	
1997 Population & 1996 Housing (NHOSP)	1125	+ 64	+ 6.3	456	+ 34	+ 8.1	
TOTAL CHANGE FROM 1970 - 1997		+ 536	+ 91.0%		+ 155	+ 51.5%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts	Town-Adopted Resource & Conservation Ordinances
Residential	Excavation Regulations
Retail Village	
Agricultural	

Non-regulatory measures for protecting Salisbury's resources include the following: ^{7, 8, 9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Objectives Element (1991)	Blackwater Project Master Plan (1997)
Housing, Population, and Income Element (1991)	
Transportation Element (1991)	
Public Utilities Element (1991)	
Municipal Facilities Element (1991)	
Existing and Future Land Use Element (1991)	
Conservation and Preservation (1991)	
Recreation Element (1991)	

TOWN RESOURCES



Water Resources

Water Supplies

The Town of Salisbury has no public water or sewer system. Its residents obtain their drinking water solely from private wells.

Between 1983 and 1997, the NHDES has issued 64 well permits to residents of Salisbury. They are scattered throughout the Town, but two significant clusters occur along Hensmith Road (12) and South Road (7). These new well locations have been mapped by NHDES. ^{10, 14}

Stirrup Iron Pond has an area of less than five acres.

Wilder Pond has an approximate area of eight acres and an average depth of five feet. It is located in the northwest corner of the Town.

Tucker Pond is 83 acres in size. It serves as a tributary to Knight Brook.

Blackwater Bay, sometimes called the Bay of Andover, is 68 acres in area. It serves as a tributary to the Blackwater River.

Greenough Pond and marsh lie east of the Blackwater River

Duck Pond is a small pond located in the southwest corner of the Town by the Warner town line.

The Blackwater River runs through Salisbury. In the north, the river flows out of Blackwater Bay. In the south, it crosses the Webster town line. The Blackwater River forms part of the Blackwater Dam and Reservoir system. It is a federally owned area, and most of the river is surrounded by conservation lands.

Beaverdam Brook flows out of a small unnamed pond between Lovering Hill and Salisbury Heights and travels east until becomes the Boscawen-Webster town line.

Mill Brook runs west out of Blackwater River.

Bradley Brook is located in the northwest corner of Salisbury.

Punch Brook flows in the northeastern part of Town.

Hydric Soils

Out of the total land acreage of Salisbury (25,344), 9.8% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1390	5.5
Very Poorly Drained - organic base	836	3.3
Very Poorly Drained - mineral base	260	1.0
Marsh	0	0
TOTALS	2486	9.8

Watersheds

Approximately ½ of Salisbury lies within the Blackwater River watershed. The rest of the Town is divided between three other watersheds: the Warner River watershed underlies a small area in the Town's southwest corner, the Merrimack River watershed underlies the Town's eastern third, and the Contoocook River watershed underlies a small central strip of land. ^{10, 12}

<u>Aquifers</u>

A stratified drift aquifer underlies the land surrounding the Blackwater River. The aquifer underlying Blackwater Bay by the Andover town line is a medium density aquifer composed of coarse sand and gravel. A high potential aquifer of very coarse high-yield sand and gravel underlies part of the river also. The largest portion of the aquifer is composed of fine sand, silt, and clay, giving Salisbury a predominately low-yield aquifer base.¹⁶

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found along the Blackwater River and surrounding Greenough Pond. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- ★ Stirrup Iron Brook
- → bogs and wetlands

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Salisbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Salisbury	Region
First Priority	Aquifers	Rivers and streams
Second Priority	Rivers and streams	Aquifers
Third Priority	Floodplains	Lakes and ponds
Fourth Priority	Shorelands	Designated prime wetlands
Fifth Priority	Other wetlands	Watersheds

Half of the respondents felt that Salisbury's ordinances and regulations do adequately protect their water resources, while half felt that they do not. ³¹

Specific comments included: 31

- We need more knowledge regarding the protection of aquifers.
- A 2-acre minimum lot size would be the most efficient regulation to protect our resources.
- ★ Water resources are not mentioned in the zoning ordinance.



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 62% of the entire Town. The following table breaks down the components: ^{8, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Agricultural Land and Woodland	NH DA	261
Benjamin Shaw Lot	Town	66
Blackwater Reservoir (portion in Salisbury)	US Army Corps	2387
Community House and fields	Town	1
Daniel Webster Birthplace Historic Site	Town	147
Higgs easement	Town	90
Kearsarge Mt. State Park (portion in Salisbury)	NH DRED	375
NH Forest Nursery (portion in Salisbury)	NH DRED	452
Reiner Woodland Conservancy	Town	849
Salisbury Elementary School Grounds	Town	3

Sanborn Agricultural Preserve	NH DA	261
Woody Glen	private	143
Current Use		16,904
TOTAL ACREAGE PROTECTED		21939

In 1998, Salisbury did not support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 Center Rangeway-West
- 2 South Rangeway
- 2 Blackwater Flood Control Area
- 2 Mt. Kearsarge State Park
- 2 NH State Forest Nursery

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Salisbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Salisbury	Region
First Priority	Open space	Open space
Second Priority	Agricultural land (tied)	Agricultural land
Third Priority	State parks or forests (tied)	Conservation easements
Fourth Priority	Orchards	Town parks and forests
Fifth Priority	none selected	Deeded conservation lands

Half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. ³¹

Specific comments 31

- We should make State parks & forests more accessible to the public. We could also lower user fees for NH residents (we are already paying for them through removal from our tax base).
- 2 There is no reference to land & forestry in our regulations. Public support is needed.

2 The federal floodplain is very important.





Historical and Cultural Resources

National Register of Historic Places

Salisbury has one exemplary site located on the National Register. It was nominated and listed in 1975. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Salisbury Academy	5/75	Junction of NH Route	The Academy Building now houses
Building		127 and US Route 4	Salisbury's Town Offices

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Salisbury currently has no historical markers listed with the New Hampshire Division of Historical Resources.²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- Salisbury's earliest settlers made their home in the southeast corner of Town in the Searles Hill area. Old cellar holes, stone foundations, and walls remain where the first homesteads were constructed.
- The Noyes House is one of Salisbury's oldest and most elegant houses. It has had many local prominent and influential owners including one of Daniel Webster's relatives.
- The Old Cemetery, located off of Route 127 near the South Road Meeting House, features gravestones from the Revolutionary War.
- The South Road Meeting House holds a wealth of Salisbury history. It was built on Searles Hill in 1768, and it was there that Daniel Webster was baptized. The Meeting House was rebuilt in 1790 on a parcel of land donated by Captain John Webster. The bell that hangs in the house is believed to be the oldest bell in New Hampshire. The gallery clock also has an interesting history; it was found on Cape Cod and had to be returned to the Meeting House in 1959. The pewter Communion Service, made of early pewter and used at the christening of Daniel Webster, is the most valuable and historic possession in the house. The South Bend Meeting House now stands at the intersection of Route 127 and Route 4.
- The Bean House is another fine example of Salisbury architecture. Joseph Bean was one of the first settlers of Salisbury, and he built his first house on Calef Hill. He later disassembled that house and built a larger one on the west side of the Fourth NH Turnpike. When the house was restored by the Lassonde family, they discovered that the

building's primary beams had been numbered, suggesting that they were the original Calef Hill House beams, carefully kept and reused when the larger house had been constructed.

- The Williams House was built in 1792 by Thomas and Eliphalet Williams. It served as a house, meeting hall, and village store all at once. It has been said that the woodworking in the house was "the finest" around. Although the house has been remodeled extensively, it retains its historic aura and still incorporates space to run a family business. It stands across from the Salisbury Town Hall on Route 4.
- Salisbury's finest Federal style house is the Green House, built in 1812 by Josiah Green and sold to Isaac Bailey a few years later. The Bailey family kept the house for many years, calling it "Poplars" and using it as a summer home. One of its finest attributes is the center chimney which serves five different fireplaces. It was recently turned into a year-round residence.
- Next door to the Green House on Route 4 is the Pettingill House, sometimes called Lt. Pettingill's Mansion, a three-storied red-brick house built in 1816. It is believed that the bricks were made at the site of the house. At one time, the house was going to be used as a boarding house for the New London Institute (the present Colby-Sawyer College).
- Construction of the Old Baptist Meeting House was completed in 1794. It served as a Baptist meeting place for many years as well the site of the Salisbury Old Home Day festivities. It is now the property of the Salisbury Historical Society.
- Salisbury still uses the white frame Town Hall that the Town built during the 1700's.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Salisbury no longer has standing covered bridges, one once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Peter's	1883	1934

Cemeteries

As do many other small Central Region towns, Salisbury has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link. There are five Town cemeteries in Salisbury. Two of them are listed below:

CEMETERIES	Owner	Parcel Number / Location
Oak Hill Cemetery	Town	East off of Oak Hill Road
Cemetery on West Salisbury Road	Town	East off of West Salisbury Road

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- Town Hall and Library
- Historical Society buildings
- Town Office building
- Pingree Bridge

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Salisbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Salisbury	Region
First Priority	Cemeteries	Cemeteries
Second Priority	Mill sites	Cultural interest sites
Third Priority	Unique stone walls	Covered bridges
Fourth Priority	no response	National Register of Historic Places
Fifth Priority	no response	Archaeological sites

All of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

- We should look into establishing a designated Historic District and/or specific sites.
- Colonial Homes are important.
- There is no reference to the our present regulations.



protection of historic or cultural resources in Public interest is needed.

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding animal species have been located in Salisbury since the 1930's as well as three outstanding natural communities. They have been recorded by the NHI program. ²⁷

Purple Martin (Progne subis) is threatened in NH, but not listed as such federally or globally.

One location in Salisbury has reported this bird within the last twenty years.

The American Bittern (Botaurus lentiginosus) is a bird that has been found at only two locations in the State within the last twenty years, one of them in Salisbury.

The invertebrate mollusk Brook Floater (Alasmidonta varicosa) is listed in the State as endangered. Four occurrences in Salisbury within the last 20 years have been recorded.

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been sighted in Salisbury once within the last 20 years.

The Wood Turtle (Clemmys insculpta) has been sighted in Salisbury at one location within the last 20 years. Only three other NH locations have reported this reptile.

A natural community valued as very high in importance is the terrestrial community Floodplain Forest. The state has only twenty-three other such communities.

Another important natural community located in Salisbury is the palustrine community of Level Bog. Only 18 other communities have been located in NH within the last 20 years.

The Acidic Level Fen is a palustrine community that has been found at one location in Salisbury. These peatlands contain higher nutrients than bogs, allowing for the greater proliferation of plant species unique to these environments.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Salisbury: 15, 18 19

A large riparian corridor is located along the Blackwater River which flows through the middle of the Town. Much of the river is surrounded by conservation land, making it an especially good environment for wildlife travel.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Salisbury: ¹⁸

Blackwater River and the lands surrounding it, especially in the Blackwater Flood Control area, offer an important habitat for many plant and animal species. It supports many wetland species including plants, birds (heron), and fish.

Greenough Pond and the marsh surrounding it also support a wide variety of plants and animals.

The Mt. Kearsarge State Park and Wildlife Management Area is located in the northwest corner of the Town and extends into Warner and Andover.

Scenic Roads and Vistas 14

Searles Hill Road winds by the site of the original settlement of Salisbury and offers pleasant views of the area.

Montgomery Road is a wonderful old road flanked by woods. It passes the old stone culvert bridge.

Heath Road and Lovering Hill Road are country roads that feature views of old stone walls, woods, and cellar holes.

Center Rangeway-west and South Rangeway offer seasonal views of woods, wildlife, and scenic stone walls.

Plains Road follows the east side of the Blackwater Flood Control area.

Beech Hill Road offers seasonal views and lovely wooded groves.

The Robie/New Road Loop passes by the old stone culvert bridge. It cuts through a variety of environments including woods, bogs, old pastures, and hay fields. It provides scenic views and passes by Daniel Webster's birthplace.

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Stirrup Iron Brook
- B bogs and wetlands
- B Center Rangeway-west land
- B South Rangeway land
- B Plains Road
- B Bradley Lake Road

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Salisbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Salisbury	Region
First Priority	Scenic vistas	Scenic vistas
Second Priority	Deeryards	Plant/tree communities (tied w/3rd)
Third Priority	Riparian corridors (all tied)	Greenway corridors (tied w/2nd)
Fourth Priority	Plant communities (all tied)	Riparian corridors
Fifth Priority	Greenway corridors (all tied) Biological diversity (all tied)	Biological diversity

All of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

- B Beaver bogs are important.
- B There is no reference to the regulating of ecological resources in our current ordinances. Public interest is needed.



1 Geologic Resources

Surficial Geology

Stratified drift outwash plains and isolated organic deposits underlie the land surrounding the Blackwater River. Gravel and sand deposits are found in scattered kames and kame terraces, and a few drumlins are found throughout the Town, one of the largest in the Town's northeastern quadrant. 12

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Beech Hill	1400'
Boston Hill	960'
Morey Hill	1440'
Racoon Hill	1260'
Ragged Mountain	2240'
Searles Hill	1040'

Taunton Hill 1160'

Bedrock Geology

Salisbury's northern territories are underlain by the Littleton Formation comprised of Undifferentiated Schists and Gneisses. This bedrock also extends into the southwestern corner of the Town. An unnamed pluton composed of Granodiorite-Biotite Granodiorite-Biotite Quartz Monzonite underlies the Blackwater River in the south-central part of Town as well as a strip of land along the Town's western border. A patch of Kinsman Quartz Monzonite is found in the region extending roughly from the Warner town line north beyond Scribner's Corner, west to Sawyer Hill, and east to Brook Road. 14, 18

Identified Geological Resource Priorities

The 1980 CNHRPC Open Space Plan named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 Old Lead Mine
- 1 Stirrup Iron Rock Formation
- 1 Corser Cliffs lead and graphite mine
- 1 Searles Hill
- 1 Raccoon Hill

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Salisbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Salisbury	Region
First Priority	Soils identification	Mountains and hills
Second Priority	Mountains and hills (tied)	Soils identification
Third Priority	Sand and gravel deposits (tied)	Sand and gravel deposits
Fourth Priority	Mining sites	Bluffs
Fifth Priority	none selected	Gorges

All of respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources. ³¹

Specific comments 31

1 These regulations are not referred to in our current ordinances. We need public support.

X Recreational Resources

A variety of recreational opportunities and resources exist in Salisbury that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Salisbury Elementary School Playground	public	east off of Route 4	4 acres
Blackwater Reservoir Natural Area	Federal	by the Blackwater River	2388 acres
Blackwater River Hiking Trails	Federal	along the Blackwater River	8 miles
Kearsarge Mountain State Park	public	Northwest corner of town	396 acres
State Forest Nursery	public	Southeast corner of town	442 acres
Woody Glen Snow Ski Area	private	off Raccoon Hill Road	143 acres
Community House and Fields	public	east off of Route 4	1 acre

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- **x** baseball fields
- × Historical Society
- **X** Library
- **★** Sunapee-Kearsarge-Ragged Greenway (SKR) trail
- **★** Salisbury Elementary School

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Salisbury. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹



RESOURCE PRIORITIES	Salisbury	Region

First Priority	Beach Access	Recreational trails
Second Priority	Canoe/boating access	Canoe/boat access
Third Priority	Recreational trails	Outdoor sporting fields
Fourth Priority	Outdoor sporting fields	Picnic areas and playgrounds
Fifth Priority	none selected	Beach access

Specific comments 31

- X Class VI roads and ski areas are also important.
- X The Town should acquire property along Blackwater River for public beach access.
- **X** We do not have beach or canoe/boat access yet, but it is good that our sporting field is protected.



Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

We need to protect large tracts of open land that are currently being preserved by the integrity of the land owner and not by any official regulation.

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Salisbury has established both a Conservation Commission and a Historical Society.

Conservation Commission

Recent activities of the Conservation Commission include: the monitoring of wetland permits for logging operations; creating plans for the laying out of new nature trails; and the organizing of "Walks about Town," eight walks that lead people through scenic Salisbury. One interesting conservation related project was the effective subdivision of Salisbury Farms. This 535-acre parcel of land was divided into 11 lots in a way that restricted further subdivisions while protecting the area's fields and woods. This technique is often referred to as open space development, or cluster development.⁸

<u>Historical Society</u>

The Salisbury Historical Society helps to protect the Town's heritage while fostering the Town's future growth. The society served as a co-sponsor for Old Home Days, organizing a craft fair and helping with the parade. It helped to fund the Artist-in-Residence at the elementary school, and provided a scholarship prize for three high school students. The Society continues to archive and care for many documents and artifacts.⁸

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Salisbury's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ building public education and support of conservation issues
- ☑ the preservation of Class VI Roads

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- securing development easements along the Blackwater River and getting rights to create a swimming spot
- working to designate canoe access points along the Blackwater River

Essential Factors to Salisbury's "Quality of Life"

- M the Town's quiet, rural character
- M low taxes
- M helpful townspeople
- M few posted signs on large parcels
- M clean air and water
- M community pride

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Salisbury Zoning Ordinance, 1998
- 7 Town Officials/Employees, 1998
- 8 Salisbury Town Annual Report, 1997
- 9 (reserved)
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Muramic County Lakes and Ponds, 1968
- 14 Salisbury Master Plan, 1991
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 (reserved)
- 31 Salisbury Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

SUTTON

About Sutton	
Member of CNHRPC	✓
Surveys Mailed	12
Surveys Received for Tallying	2
REPP Meeting Participation	×
Profile Review & Comment by	×

Historical Profile

No brief historical profile of Sutton is available.

<u>Present-Day Profile</u>
The area of Sutton is 27,456 acres, or 42.9 square miles. The Town comprises 5.3% of the CNHRPC area. ²

Over the last twenty-seven years, Sutton's population has grown by 132% while the number of housing units has increased by 72%: 3,4,5

GROWTH	Population	Net (Change %	Housing Units	<u>Net C</u> #	Change %	
1970 (US Census)	642	na	na	473	na	na	
1980 (US Census)	1091	+ 449	+ 69.9	660	+ 187	+ 39.5	
1990 (US Census)	1457	+ 366	+ 33.5	776	+ 116	+ 17.8	
1997 Population & 1996 Housing (NHOSP)	1489	+ 32	+ 2.2	815	+ 39	+ 5.0	
TOTAL CHANGE FROM 1970 - 1997		+ 847	+ 131.9%		+ 342	+ 72.3%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Residential	Floodplain Development Ordinance
Rural/Agricultural	Cluster Development Ordinance

Non-regulatory measures for protecting Sutton's resources include the following: ^{7, 8, 9}

Town Master Plan Elements Town Conservation Plans, Reports and Studies

Goals and Objectives (1988)	An Assessment of Wetlands Management and Sediment Phosphorus Inactivation, Kezar Lake, New Hampshire (1989)
Development of Land (1988)	An Inventory and Assessment of Wetlands in the Town of Sutton, New Hampshire (1996)
Conservation and Preservation (1988)	
Town Services (1988)	

TOWN RESOURCES



Water Resources

Water Supplies

The Town of Sutton does not have any public water supplies. The Town's population is concentrated in a way that neither facilitates nor necessitates a central water supply. Instead, individual wells bring water to Sutton's households.

Between 1983 and 1997, the NHDES has issued 87 well permits to residents of Sutton. Large groups of them are located on Route 114 (16) and Shaker Road (15). These new well locations have been mapped by NHDES. ¹⁰

Ponds ^{11, 12, 13, 14}

Poor Farm Hill Pond shares its shores with both Newbury and Sutton. This 127-acre pond has an average depth of 12 feet. It is sometimes called the Newbury Reservoir or the Loch Lyndon Reservoir.

Kezar Lake is the second largest water body found in Sutton with an area of 143 acres. This lake lies in north-central Sutton and has a maximum sounded depth of 25 feet. During the summer, Sutton's residents enjoy this pond's picnic areas and swimming beaches.

Gile Pond is a 57-acre natural pond that is located near Kezar Lake, south of North Sutton Village. Shadow Hill State Forest borders the east side of this pond.

Blaisdell Lake is located in the southwestern corner of Sutton near the Bradford town line. This is the largest lake located in Sutton with an area of 158 acres and an average depth of 21 feet. It is used extensively for recreational activities, and many summer residences are located along its shores.

Russell Pond is a small 15-acre pond with an average depth of six feet. It is located upstream from Blaisdell Lake.

Rivers 11, 12, 13, 14

The Lane River forms in central Sutton from the confluence of several small brooks. The River then flows southeast for several miles until it enters Warner and converges with the Warner River

Brooks 11, 12, 13, 14

Cascade Brook flows from Wilmot into Sutton's northeastern corner. The brook then travels south and disperses into the Cascade Marsh.

King's Brook flows from the center of the Sutton-Newbury border south a few miles to where it converges with Crate Brook. The confluence of these streams helps form the Lane River.

Crate Brook flows south, past Kezar Lake, to its confluence with King's Brook. The joining of these small streams helps form the Lane River.

Thistle Brook flows from the Gile Pond area southwest along Route 114. It also joins the Lane River.

Stevens Brook is formed by the confluence of several small brooks near the New Hampshire Country Club in east-central Sutton. This large brook flows for several miles in a southerly direction along Interstate 89. In south Sutton, the Interstate and the brook turn east and continue into Warner.

Hydric Soils

Out of the total land acreage of Sutton (27,456), 11% is comprised of hydric soils: ^{14,33}

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1542	5.6
Very Poorly Drained - organic base	1040	3.8
Very Poorly Drained - mineral base	324	1.2
Marsh	108	.4
TOTALS	3014	11.0%

Watersheds

Most of Sutton lies inside the Merrimack River principal drainage basin and the Contoocook River sub-basin. In the northwest corner of Sutton, the western face of King's Mountain drains into Lake Sunapee (part of the Contoocook River principal drainage basin). The Blackwater River sub-watershed drains the northeastern section of the Town, and the Warner River sub-watershed drains the rest. ^{10, 14}

Aquifers

The largest stratified drift aquifer in Sutton is found in the eastern part of Town between Cascade Marsh and Stevens Brook. Unfortunately, its shape and location do not make it a prime candidate for a water supply. A high-yield stratified drift aquifer is located near North Sutton Village by Kezar Lake. A small aquifer also lies just south of Chalk Pond Road by the Sutton-Newbury town line. 14, 16

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of wetlands occur in the eastern part of Town, adjacent to Cascade Brook and Stevens Brook. The Lane River, Lyon Brook, Crate Brook, and King's Brook are also bordered by occasional wetlands, the most extensive of which lie between Kezar Lake and Gile Pond. Another extensive wetland area stretches along the east side of Route 114 in North Sutton. Wetlands also run beside Meeting Hill Road and Eaton Grange Road, and along the west side of Route 114 as it heads south. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ^{14, 18}

- + Kezar Lake and the brooks and streams inside the Kezar Lake watershed
- → wetlands
- → aquifers
- → rivers and streams
- → lakes and lake shores

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Sutton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Sutton	Region	
First Priority	Rivers and streams (tied)	Rivers and streams	
Second Priority	Lakes and ponds (tied)	Aquifers	
Third Priority	Shorelands	Lakes and ponds	
Fourth Priority	Other wetlands	Designated prime wetlands	
Fifth Priority	Watersheds	Watersheds	

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

+ Large buffer zones should be placed along all riparian corridor.



2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be 73% of the entire Town. The following table breaks down the components: ^{8, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Aquaville Wetland	Town	31
Billings Pond Island	Town	1
Bing easement	Town	247
Bristol easement	Town	252
Cascade Marsh Easement	NH F&G	118
Cascade Marsh WMA	NH F&G	327
Chadwick Meadows WMA	NH F&G	100
Cloves/Stevens Brook Natural Area	Town	24
Emerson easement	Town	32
Enroth easement	Town	39
Kearsarge Regional High	Town	80
Keith #1 easement	Town	52
Keith #2 easement	Town	57
Keith #3 easement	Town	2
Loon Island	Town	1
Mildred T Leffert Natural Area	Town	5
Rest Area	NH DOT	1
Shadow Hill State Forest	NH DRED	34
Sprout Lot	Town	4
Sutton Pines	SPNHF	4
Sutton Town Forest & Wetland	Town	75
Sutton Elementary School	Town	1
Wadleigh State Park	NH DRED	43
Warner Town Forest (small portion in Sutton)	Warner	0
Current Use		18,534

	-	
TOTAL ACREAGE PROTECTED		20064

In 1998, Sutton supported a 25% land use change tax allocation, with no cap, to be directed to the Conservation Fund for additional land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: 18,32

- 2 Town forests and wetlands
- 2 Lefferts Town Natural Area

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Sutton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Sutton	Region
First Priority	Agricultural land	Open space
Second Priority	Conservation easements	Agricultural land
Third Priority	Deeded conservation land	Conservation easements
Fourth Priority	State parks	Town parks and forests
Fifth Priority	Town parks	Deeded conservation lands

Half of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources, while half disagreed. ³¹

Specific comments 31

- 2 Private forests are also very
 - Current use is valuable it needs more funded/non-lapsing land protection
- 2 Conservation is not keeping pace with development



2

Historical and Cultural Resources

National Register of Historic Places

Sutton has no exemplary sites located on the National Register. No additional regulative

restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property. 1,24

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or of where a historical event took place.

John Sargent Pillsbury is remembered for his distinguished service as Governor of Minnesota and his outstanding career as an entrepreneur with a marker near the place of his birth. He, his brother and his nephew started the Pillsbury Flour Milling business around 1855 in Minneapolis. He was elected three times the governor of Minnesota and had a illustrious career as a public official, and is today remembered as a pioneer of the baking industry. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- A marker has been placed at the Muster Field Farm Museum to commemorate the historic Harvey Homestead.
- Many summer camps and hotels were located at Smiley Grove on Lake Blaisdell.
- A historic marker resides at Sutton Free Library in the Sutton Mills Region.
- A marker lies next to Province Road (at the East Sutton Cemetery).

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. There are no records or remnants of any covered bridges in Sutton. ²⁶

Cemeteries

As do many other small Central Region towns, Sutton has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
North Sutton Cemetery	Town	off Route 114, by Kezar Lake
Gore - Palmertown Cemetery		off Kearsarge Gore Road
Sutton Mills Cemetery		Sutton Mills, off Village Road
Millwoods Cemetery		between the Lane River and Dump Road
Old South Cemetery		off Meeting House Road
East Sutton Cemetery		southeastern Sutton, off East Sutton Lane

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

cemeteries

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Sutton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Sutton	Region
First Priority	Cultural interest sites	Cemeteries
Second Priority	National Register of Historic Places (tied)	Cultural interest sites
Third Priority	Unique cellar holes (tied)	Covered bridges
Fourth Priority	Cemeteries	National Register of Historic Places
Fifth Priority	Covered bridges	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations did not adequately protect their historical and cultural resources. ³¹

Specific comments 31

- Old buildings and houses are important and should be preserved
- Historic districts are often very efficient at preservation and protection

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Sutton since the 1930's as well as one outstanding natural community and recorded NHI program's database. ²⁷

The Atlantic White Cedar (*Chamaecyparis thyoides*) is known to exist in 32 locations across the State. In Sutton however, there are only historical locations.

Ciliated Willow-Herb (*Epilobium cilatum*) is known to exist at only one location in the State, in the Town of Sutton. The species of plant is threatened in the State of New Hampshire.

A natural community valued as extremely high in importance is the Southern New England

Acidic Seepage Swamp. While 17 of these precious swamps exist in the State, the location once found in Sutton no longer present.

A Great Blue Heron Rookery (*Ardea herodias*) is found in Sutton and at 32 other recorded locations around the State.

Least Bittern (*Ixobrychus exilis*) has been reported at one location in Sutton. Only one other town in New Hampshire has reported the bird.

The Northern Harrier (*Circus cyaneus*) is listed as threatened in the State of New Hampshire. There is only one recorded site in Sutton and 25 others across the entire State.

Pied-Billed Grebe (*Podilymbus podiceps*) is listed as endangered in the State of the New Hampshire, but not Federally or globally. This rare bird has one known location in Sutton and only nine others throughout the rest of the State.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Sutton: 15, 18 19

A riparian corridor follows the Lane River in the south-central part of Sutton. In the south, Robie Road runs along the River's eastern banks.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Sutton: 18

The Cascade Marsh Wildlife Management Area, located in Sutton's northeastern quadrant, is a 300+ acre natural area comprised of donated conservation lands. The NH Fish and Game Department oversees the area's management.

Scenic Roads and Vistas

King Hill Road and Poor Farm Road attract travelers by their forests and scenic views. Meeting House Road and Kearsarge Gore road feature views of old cemeteries, forests, and wildlife. Gile Road and Cotton Road pass ponds and wetlands.

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

B Lefferts Town Natural Area

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Sutton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Sutton	Region
First Priority	Animal communities (all tied)	Scenic vistas
Second Priority	Plant/tree communities (all tied)	Plant/tree communities (tied w/3rd)
Third Priority	Scenic vistas (all tied)	Greenway corridors (tied w/2nd)
Fourth Priority	Riparian corridors (all tied)	Riparian corridors
Fifth Priority	Biological diversity	Biological diversity

Half of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources, while half disagreed. ³¹

Specific comments 31

- B Riparian corridors are of particular importance
- B Need to protect vernal pools

and 4th order streams

1 Geologic Resources

Surficial Geology

A wide range of elevation, from 440' at the southeast corner of Town to 1880' at the summit of King's Hill, can be found in Sutton. More than half of the land area is above 1000', and much of the Town is covered with slopes exceeding 25%. ^{14, 28}

The following geologic formations are hills found in Sutton: 14, 28

MOUNTAINS AND HILLS	Elevation
Hedgehog Hill	1200'
Wright Hill	1180'
Nelson Hill	1140'
Burpee Hill	1100'

The Pinnacle	1240'
Meetinghouse Hill	1360'
Fellows Hill	1660'
Dresser Hill	1300'
Dodge Hill	1180'
King's Hill	1880'
Rowell Hill	1260'
Wadleigh Hill	1160'
Green Hill	

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

1 no specific resources have been identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Sutton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Sutton	Region	
First Priority	Mountains and hills	Mountains and hills	
Second Priority	Soils identification	Soils identification	
Third Priority	Gorges	Sand and gravel deposits	
Fourth Priority	Eskers, kames & drumlins	Bluffs	
Fifth Priority	Caves	Gorges	

Half of the respondents felt that the Town's ordinances and regulations did not adequately protect their geologic resources, while half disagreed. ³¹

Specific comments 31

- Bat habitats should be preserved including caves, talus slopes, etc.
- Cliffs and bluffs should also be preserved.

X Recreational Resources

A variety of recreational opportunities and resources exist in Sutton that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: $^{18, 29, 30}$

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Muster Field Farm Museum/Harvey Homestead	private	north of Kezar Lake off Harvey Road	280 acres
Smiley Grove	private	off Route 114, by Kezar Lake	
Camp Wabasso	private	Lake Blaisdell	200 acres
Kearsarge Regional High	public	off North Road	80 acres
Sutton Elementary School	public		1 acre
Cascade Marsh	public	northeastern corner of Town	135 acres
Chadwick Meadows WMA	public	north central Sutton	100 acres
Shadow Hills State Forest	public	central Sutton	34 acres
Mildred T. Leffert Natural Area	public		5 acres
Sutton Town Forest and Wetlands	public		75 acres
Stevens Brook Natural Area	public	eastern Sutton along Interstate 89	24 acres
Sutton Pines	public		4 acres
Picnic/Rest area	public	off Interstate 89 - central Sutton	
Wadleigh State Park	public	south of Kezar Lake	43 acres
Country Club of New Hampshire Inc.	private	off Kearsarge Valley Road	434 acres
Quarry Walk (trail)	private	near Stone House Road in northwest Sutton	1 mile
Stone House Road (trail)		Stone House Road	2 miles
King Hill Road (trail)	public	along King Hill Brook	2 miles
Poor Farm Road (trail)	public	connects Baker Hill and King Hill Roads	2 miles



Muster Field Walk (trail)	public	loop including Harvey Road, Lover's Lane, Hominy Pot Road, Keyser Street, Muster	2 miles	
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		Field Farm Museum	
Cotton Road (trail)	public	Cascade Marsh	1 mile
Kezar Lake Walk (trail)	public	around Kezar Lake	3 miles
Kearsarge Valley Trail	public	Wadleigh State Park, Town Forest and wetlands, Shadow State Forest, private lands	4 miles
Wadleigh Hill Road/ Corporation Hill Road (trail)	public	Wadleigh State Park, Town Forest, historic sites	2 miles
Primeval Pines Walk (trail)	public	off Whiskey Pine Road	1 mile
Link Trail	public	connects Kearsarge Valley Trail and Lincoln Trail	1 mile
Pound Road (trail)	public	off Route 114	2 miles
Lincoln Trail	public	runs between Kearsarge Regional High school and Rollins State Park	5 miles
Meeting House Road (trail)	public	South Sutton Common	1 mile
Eaton Grange Road (trail)	public		4 miles
Kearsarge Grange Road (trail)	public	branches northeast off North Road, crosses the Warner town line	2 miles
Dodge Hill (trail)	public	roads on Dodge Hill, southwestern Sutton	5 miles
Bum Carter Road (trail)	public	east of Blaisdell Lake	1 mile
Blaisdell Hill Walk (trail)	public	loop, Camp Kemah Road, Blaisdell Farm Road, and Blaisdell Hill Road	2 miles
Gile Road (trail)	public	Gile Pond	1 mile

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

× no specific resources were identified

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Sutton. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Sutton	Region
First Priority	Recreational trails	Recreational trails

Second Priority	Canoe/boat access	Canoe/boat access			

Third Priority	Picnic areas & playgrounds (tied)	Outdoor sporting fields	
Fourth Priority	Beach access (tied)	Picnic areas and playgrounds	
Fifth Priority	Outdoor sporting fields	Beach access	

Specific comments 31

X Public access to undeveloped lands is overdone - some should remain untouched by the public.

Other Identified Resource Priorities

Town officials and volunteers have named the following other resource as being particularly important to the Town: ¹⁸

citizen education on zoning on planning is essential

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Sutton has established a Conservation Commission.

Conservation Commission

The very active Conservation Commission has been involved in a great number of activities, including: monitoring dredge and fill applications; examination of intent to cut wood applications from the perspective of potential wetland impacts; inspection of Town properties under conservation commission management; coordination of the planting of a crabapple tree; roadside clean-up; maintenance and further development of walking trails; published "A Guide to Public Recreation Sites"; participation in the Sunapee-Ragged-Kearsarge Greenway coalition; continuing activities of the joint Sutton-New London Kezar Lake Watershed Committee; with the help of UNH, studied seven wetlands; assessed property and recommended to selectmen how it should be protected, and several more activities.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Sutton's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ building preservation through adaptive use
- ✓ wetland conservation through setback provisions
- ✓ ecological inventory and management plans
- ✓ wildlife inventory

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

teach/reach 2500-5000 NH residents through SPNHF Outreach Programs which will be conducted statewide

Essential Factors to Sutton's "Quality of Life"

- M sparse development
- M clean air and water
- M forest preservation and growth control
- M maintaining the Town's rural character through open space preservation
- M provide land conservation economic incentives to land owners
- M control the Current Use taxation program

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Sutton Zoning Ordinance, 1994
- 7 Town Officials/Employees, 1998
- 8 Sutton Town Annual Report, 1997
- 9 Sutton Site Plan Review Regulations, 1991
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Sutton Master Plan: Land Use Element, 1988
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 Visit NH Webpage: Merrimack Valley Attractions, 1998
- 31 Sutton Survey Results, 1998
- 32 A Guide to Public Recreation Sites Points of Interest Trails and Interesting Walks, 1996
- 33 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

WARNER

Ahout Warner	
Member of CNHRPC	✓
Surveys Mailed	18
Surveys Received for Tallying	5
REPP Meeting Participation	✓
Profile Review & Comment by	*

Historical Profile

Warner was granted by the General Court of Massachusetts in 1735 under the name of Township "Number One." In 1773, New Hampshire granted the region to some settlers from Rye, and one year later Governor Wentworth incorporated the Town. Transportation played a large part in Warner's growth. During the 1820's, donations from wealthy Warner residents provided for the building of new roads. These less hilly routes became well-traveled stage lines, and people traveling throughout New England passed through Warner everyday. In 1849, the railroad arrived, and the Town's reputation as a travel-stop was again enhanced. Agriculture, small industry, and tourism were also important to Warner's development. Today, as Interstate 93 bisects the Town, Mount Kearsarge and its majestic vistas continue to bring visitors to the area.¹

Present-Day Profile

The area of Warner is 35,392 acres, or 55.3 square miles. The Town comprises 6.9% of the CNHRPC area. ²

Over the last twenty-seven years, Warner's population has grown by 71% while the number of housing units has increased by 56%: ^{3, 4, 5}

GROWTH	Population	Net #	Change %	Housing Units	<u>Net C</u> #	Change %	
1970 (US Census)	1,441	na	na	720	na	na	
1980 (US Census)	1,963	+ 522	+ 36.2	899	+ 179	+ 24.9	
1990 (US Census)	2,250	+ 287	+ 14.6	1,039	+ 140	+ 15.6	
1997 Population & 1996 Housing (NHOSP)	2,460	+ 210	+ 9.3	1,122	+ 83	+ 8.0	
TOTAL CHANGE FROM 1970 - 1997		+ 1019	+ 70.7%		+ 402	+ 55.8%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts

Town-Adopted Resource & Conservation Ordinances

Village Residential District (1992)	Telecommunications Ordinance
Medium Density Residential District (1992)	
Low Density Residential District (1992)	
Open Conservation District (1992)	
Open Recreation District (1992)	
Business District (1992)	
Commercial District (1992)	

Non-regulatory measures for protecting Warner's resources include the following: ^{7, 8, 9}

Town Master Plan Elements

Town Conservation Plans, Reports and Studies

Goals and Objectives (1989)	Willow Brook Watershed Study
History Element (1989)	
Population and Economics Element (1989)	
Land Use Element (1989)	
Housing Element (1989)	
Transportation Element (1989)	
Community Facilities and Services Element (1989)	
Utilities Element (1989)	

In 1999, the Warner Master Plan Committee will have completed the update to its Master Plan.

TOWN RESOURCES



Water Resources

Water Supplies

The Silver Brook Reservoir supplies the Town of Warner with its public drinking water. Silver Brook flows between the Mink Hills and Waldron Hill in the south central part of the Town.

Between 1983 and 1997, the NHDES has issued 65 well permits to residents of Warner. These new well locations have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13, 14

Bagley Pond, located in the northeast corner of Warner, has an area of 19 acres and an average depth of nine feet. It serves as a tributary to Frazier Brook.

Bear Pond is a 49-acre natural pond that has been raised by damming. It provides drinking water for the villages of Hopkinton and Contoocook.

Cunningham Pond is located in the southwest corner of Warner by the Chandler State Forest. This 22-acre body of water is the source of Warner Brook.

Tom Pond is located in the southeastern corner of Warner, west of the Warner River and north of Pleasant Pond. It is approximately 31 acres in size and is sometimes called Diamond Lake.

Pleasant Pond is 16 acres in size. It is located just north of the Hopkinton-Warner border, beside Tom Pond.

Simmons Pond is a natural pond found north of Melvin Mills in the northwest section of Town. The pond is 16 acres in size and has an average depth of 18 feet. It serves as a tributary to the Warner River.

Mud Pond is a small 3.5-acre pond that lies along the Warner-Webster town line. It flows into Schoodac Brook.

The Warner River originates in Bradford and flows south-easterly for a total of 22 miles, 13.8 of which lie inside the Town of Warner. The river cuts diagonally through the center of Town, crosses into Webster, and flows east until it joins the Contoocook River in Hopkinton. Most of the river's drainage area also lies within Warner (80%).

Brooks 11, 12, 13, 14

Willow Brook crosses into Warner from Salisbury. Willow Brook and its watershed are the recent focus of study for the Conservation Commission.

Frazier Brook flows out of Bagley Pond.

Schoodac Brook runs northeast of the Warner River.

Ballard Brook is located in southern Warner.

Meadow Brook flows through the northern panhandle of Warner.

French Brook also runs alongside Rollins State Park in the northern panhandle of Warner.

Silver Brook meets the Warner River close to the Village Center.

Stevens Brook enters Warner from Sutton and flows into the Warner River.

Warner Brook flows out of Cunningham Pond.

Hydric Soils

Out of the total land acreage of Warner (35,392), 6.8% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	1,375	3.9
Very Poorly Drained - organic base	594	1.7
Very Poorly Drained - mineral base	348	1.0
Marsh	82	0.2
TOTALS	2,399	6.8%

Watersheds

Warner lies almost entirely within the Warner River watershed. Other less predominant watersheds drain the rest of the Town. The Silver Brook watershed underlies a small section of Town just south of the Warner River. The tip of Warner's northern panhandle lies in the Blackwater River watershed which drains off the southeast side of Mt. Kearsarge, and the Contoocook River watershed drains a small southern section of Town via Amey Brook and Warner Brook.

Of significant note, the Conservation Commission has been engaging in a detailed inventory of the Willow Brook sub-watershed for analysis of a potential future public water supply. ^{10, 14, 18}

Aquifers

Warner's largest potential aquifer underlies the southeastern corner of Town; a few smaller pockets underlie other parts of Town. 14, 16

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Areas of mapped wetlands which do not co-occur with ponds are found just south of Mud Pond, along Schoodac Brook, and along the Warner River in the Town's southeastern corner. 17

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- → Willow Brook and the Willow Brook watershed
- → Stevens Brook
- + Black Gum Swamp
- → Bagley Pond
- **♦** Simmons Pond
- → Warner River
- ★ Tory Meadow Pond
- ✦ Schoodac and Frazier Brooks

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Warner. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Warner	Region
First Priority	Rivers and streams	Rivers and streams
Second Priority	Watersheds	Aquifers
Third Priority	Designated prime wetlands	Lakes and ponds
Fourth Priority	Lakes and ponds	Designated prime wetlands
Fifth Priority	Aquifers	Watersheds

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their water resources. ³¹

Specific comments included: 31

- We need to change our zoning to better protect the Warner River, floodplains, and wetlands. We should also encourage easements and current use, and we need regulations to protect the Town from excessive developing.
- + The ordinances protecting Warner's wetlands are the most effective.
- + We need greater setback requirements. Watersheds and aquifers are critical to groundwater supplies.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 87% of the entire Town. The following table breaks down the components: $^{8, 20, 21, 22}$

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Ashendon State Forest	NH DRED	168
Bagley Athletic Fields	Town	20
Bagely/Stillman Clark Parcel	Town	39
Carroll State Forest	NH DRED	29
Carter easement	Town	34
Chandler Reservation	Town	1440
Contoocook River Precinct Land	Town	169
Davisville State Forest	NH DRED	19
Gilmore State Forest	NH DRED	37
Harriman Chandler State Forest	NH DRED	395
Hill Tract #1	Town	64
Hill Tract #2	Town	8
Hill Tract #3	Town	1
Hill Tract #4	Town	2
Jellome Woods	SPNHF	48
Kumin easement	Town	108
Mount Kearsarge State Forest	NH DRED	3991
Mount Kearsarge State Forest (Goodnow)	NH DRED	660
Mount Kearsarge State Forest (Lowell)	NH DRED	316
Ordway Woods	Town	4
Royce Well Site	Town	7
School Street Park	Town	13
Scott/Ballou Lot	Town	40
Silver Lake Recreation Area	Town	12
Simonds School Grounds	Town	5

Simmons Pond Remote Access Facility	Town	17
Rollins State Park	NH DRED	118
Warner River Parcel	Town	4
Warner Town Forest	Town	906
Warner Town Beach on Silver Brook	Town	6
Warner Village Water District	Town	22
Current Use		22,250
TOTAL ACREAGE PROTECTED		30952

In 1998, Warner did not support a land use change tax allocation to be directed to the Conservation Fund for land acquisition. ²³

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 Warner Black Gum swamp
- 2 the large unfragmented forest in the south and southwestern section of Warner
- 2 Warner River Floodplain

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Warner. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Warner	Region
First Priority	Open Space	Open space
Second Priority	Conservation Easements	Agricultural land
Third Priority	Agricultural land	Conservation easements
Fourth Priority	Deeded conservation lands	Town parks and forests
Fifth Priority	Town parks and forests	Deeded conservation lands

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their land and forestry resources. ³¹

Specific comments 31

We need to educate the public on the benefits of open space and conservation easements.

The Town should look into the establishment of a Conservation Capital Reserve Fund for the purchase of land and easements. We need to protect the Warner River, Meadow Marsh, Willow Brook, and Mt. Kearsarge.

Historical and Cultural Resources

National Register of Historic Places

Warner has two exemplary sites located on the National Register. One was nominated and listed in 1976. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Dalton Covered Bridge	11/76	On Joppa Road, spanning the Warner River, South of Route 103	Classified as a long truss with auxiliary queenpost system. Built in 1853, it is one of the oldest standing covered bridges in use today.
Waterloo Bridge	Unk.	On New Market Road, west of Warner Village, spanning the Warner River	Classified as a town lattice truss.

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Currently Warner has no historical markers listed with the New Hampshire Division of Historical Resources. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- The 80-foot long Warner-Bagley Bridge was built over the Warner River in 1800, two miles east of Warner Village. It was bypassed by a highway in 1933, and was used as a foot bridge until 1966 when it was removed and relocated to Ashland, New Hampshire.
- George A. Pillsbury was a resident of Warner from 1840-1852. His gift of \$16,000 funded the construction of the Pillsbury Free Library in 1862.
- The Warner Parade Grounds were used for festivities before and during the Revolutionary War. The grounds also house one of the Town's oldest cemeteries.
- A marker commemorates the birth of Daniel Kimball, the first non-Native American child born in Warner (October 11, 1762).
- Two quarries operated in Warner during the nineteenth century; the Line Ledge Quarry and the Soapstone Quarry.
- The old cemetery at the Town Center contains many at graves with interesting epitaphs.

- The 1849, white-frame Town Hall served as Warner's political and social center for over 60 years. In 1910, the Town constructed its present Town Hall, moving the old building to Pumpkin Farm where it was converted into a cattle barn.
- The Warner Hotel was the first frame structure built in Warner Village (1785). It was moved to Pumpkin Hill Road in 1909 to be used as a barn.
- The Baptist Church was built by 22 local men in 1833.
- The Methodist Meeting House was a white frame building built in the early 19th century. The Warner Historical Society now owns the property.
- The United Church of Warner was built in 1819, also functioning as the Congregationalist Meeting House. In 1845, this white frame church was moved to its present location on Main Street.
- Numerous railroad stations operated in Warner from the middle of the 19th century to the middle of the 20th century. Among them are the Warner Village Station, the Diamond Station, two Waterloo Stations, and the station at Roby's Corner.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Two covered bridges still stand in Warner. Twelve more existed at one time: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Dalton Bridge	1853	standing
Waterloo Bridge	rebuilt in 1857	standing
Bagley	1830's	unknown
Roby	unknown	unknown
Amesbury, Davisville	unknown	1936
Lower Village	unknown	1930
RR #128, Bagley	1850	1922
RR #133, Warner	1850	1922
RR #134, Davis	unknown	1926
RR #138, Roby's	1820	1911
RR #139, Eastman	unknown	1926
RR #140, Redington	1859	unknown

RR # 142, Rodgers	1850	1922
RR #143, Melvin Mills	1874	1922

Cemeteries

As do many other small Central Region towns, Warner has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Parade Ground Cemetery	Town	
Cemetery		by the Waterloo Bridge, along the Warner River
Cemetery		by French Brook
Cemetery		intersection of Pumpkin Hill and Mason Hill Roads
2 Cemeteries at the Village Center		Village Center

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- agriculture regions
- lime kiln
- masonless arch
- Devil's Den cave
- quarries
- the summit of Mount Kearsarge

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Warner. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Warner	Region
First Priority	Covered bridges	Cemeteries
Second Priority	Cultural interest sites (tied)	Cultural interest sites
Third Priority	Archaeological sites (tied)	Covered bridges
Fourth Priority	Stone walls	National Register of Historic Places
Fifth Priority	Unique cellar holes	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations adequately protect their historical and cultural resources. ³¹

Specific comments 31

Warner currently does nothing

We need to increase public to contribute to Warner's



to protect stone structures.

interest in historical sites, and use that interest tourism.

The Town is encouraging scenic road designations. The Historical Society is presently identifying cellar holes.

B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Warner since the 1930's as well as one outstanding natural community. Locations were recorded in the NHI database: ²⁷

Andrews Gentian (Gantiana andrewsii) is threatened in New Hampshire, but not listed as such federally or globally. Within the last twenty years only two locations within the State have reported harboring this plant. It is recorded that Warner once did also, but there have been no recent recordings.

The Ciliated Willow Herb (Epilobium ciliatum) is also threatened in the State. Warner harbored the species at one time but it has not been found recently. Within the last twenty years, only one location has been recorded in the State.

The Small Whorled Pogonia (Isotria medeoloides) is endangered in New Hampshire, and threatened throughout the rest of the United States. It is listed in the NHI as a species of "highest importance." Forty-nine locations have been named in the State within the last 20 years, one in Warner.

The Abandoned Mine Bat (Bat hibernaculum) is a threatened mammal that has been found at one location in Warner within the last twenty years. Seven other locations were also named in New Hampshire.

Two New Hampshire locations were reported to house the rare mammal known as the Eastern Pipistrelle (Pipistrellus subflavus); one such location was reported in Warner.

The Columbine Duskywing (Erynnis lucilius) is an invertebrate that has been found at only two locations in New Hampshire during the last twenty years. Warner reported locations once also, but not in recent history.

The Blackgum/Red Maple Basin Swamp is a palustrine natural community that once was

reported in Warner. In the last twenty years, only nine such communities have been located in the entire State.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Warner: 15, 18 19

The Warner River corridor cuts southeasterly through the center of Warner. Many of Warner's village districts are located along this river, and Route 103 runs beside the waterway for most of its journey across Town. Despite these developments, this corridor can be assumed to provide protected access between different habitats.

The old railroad grade runs through the southern part of Warner. For a short while, it follows the Warner River, providing an additional travel corridor for many animals.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Warner: ¹⁸

Simmons Pond, located in the northwest corner of the Town, has been reported to have good potential for upland game species and water species. It harbors several pure hemlock stands.

A heron rookery has been sighted within Town.

Scenic Roads and Vistas

Beautiful scenic viewsheds abound from the summit of Mt. Kearsarge. Other ridge lines in the Mount Kearsarge State Park also provide scenic vistas.¹⁴

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Mt. Kearsarge and its vistas
- B Black Gum Swamp

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Warner. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Warner	Region
First Priority	Biological diversity	Scenic vistas
Second Priority	Greenways	Plant/tree communities (tied w/3rd)
Third Priority	Plant/tree communities	Animal communities (tied w/2nd)
Fourth Priority	Scenic vistas	Riparian corridors
Fifth Priority	Riparian corridors	Biological diversity

The majority of the respondents felt that the Town's ordinances and regulations adequately protect their ecological resources. ³¹

Specific comments 31

- B Warner's Master Plan update will address these issues by encouraging zoning changes.
- B We need river setbacks.

1 Geologic Resources

Surficial Geology

Sand and gravel deposits lie in kames and kames terraces along the Warner River. Stratified drift outwash plains are found along the river also, especially in the southeast section of Town, close to where the Warner River crosses into Webster. Flood Plain Alluvium from the Recent Period underlies a patch of land near this area also. Isolated drumlins are found in the eastern part of Town, a large one just north of Tory Meadow Pond. 12, 14

Additional and perhaps more recognizable geologic formations are mountains and hills: 14, 28

MOUNTAINS AND HILLS	Elevation
Bible Hill	1260'
Black Mountain	2560'
Burnt Hill	854'
Clark Hill	1160'
Couch Hill	1140'
Denny Hill	680'

Gage Hill	1760'
Little Mountain	2360'
Mount Kearsarge	2937'
Pumpkin Hill	940'
Stanley Hill	860'
Stewart's Peak	1780'
Tory Hill	820'
Waldron Hill	1040'

Bedrock Geology

Warner's bedrock is made up of a variety of types. The metamorphic bedrock underlying the Town is the Littleton Formation of undifferentiated schists and gneisses. This type is found in the Town's central and eastern regions as well as in part of the Town's northern panhandle. Warner's most predominant plutonic bedrock is composed of kinsman quartz Monzonite which covers the entire western half of Warner. A small patch of binary or Concord Granite (light grey or white) extends across the Warner-Bradford town line, and a pluton comprised of Granodiorite-Biotite Ganodiorite-Biotite Quartz Monzonite is found in a small southern section of the Town. 12, 14

Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 lime kiln
- 1 quarries

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Warner. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Warner	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Soils identification	Soils identification
Third Priority	Sand and gravel deposits	Sand and gravel deposits
Fourth Priority	Gorges (tied)	Bluffs

Fifth Priority	Eskers (tied)	Gorges
T Hell T Hority	Eskers (trea)	301503

The majority of the respondents felt that not adequately protect their geological



the Town's ordinances and regulations do resources.³¹

Specific comments 31

I would like to see ridge lines protected from development and gravel pit rehabilitation enforced.

X Recreational Resources

A variety of recreational opportunities and resources exist in Warner that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Camp Piesaule (camp ground)	private	close to Lake Massasecum, by the Bradford town line	380 acres
Simonds School Grounds	public	off Route 103, by Warner Village	5 acres
Ashendon State Forest	public	in south-central Warner, off Old Henniker Road, along Warner Brook	168 acres
Runaway Farm Campground	private		35 acres
Bagley Field	public	beside the Warner River, Off Route 103, just west of Red Chimney Road	20 acres
Rollins State Forest	public	in the Town's northern panhandle	118 acres
Riverside Park	public	off Route 103, by Warner Village	17 acres
Gilmore State Forest	public	off of Route 103, by the Warner River	39 acres
Davisville State Forest	public	by Tom Pond, off of Route 103	19 acres
Carroll State Forest (hiking trails)	public	off of Old Denny Hill Road	29 miles
Chandler Reservation	public	south off Bean Road	1345 acres
Chandler-Harriman State Forest	public	northwest of Mink Hill Road	395 acres
Kearsarge Mountain State Forest	public	in the northern panhandle	1743 acres
Highlawn Farm Horse Trails	private		300 miles
Phrogg Hollow Mini-Golf	private	off Route 103, close to Webster	
Jellome Woods Natural Area	private	off of Route 103, by Davisville, close to the	47 acres

		Warner-Webster border	
Warner Town Beach at Silver Brook	public	off North Village Road	6 acres
Warner Town Forest	public	along the western border of the Town's panhandle, off Interstate 89	
Warner Ski Area	public	part of Chandler-Harriman State Forest	

Identified Recreational Resource Priorities

Past town records have named the following recreational resources as being particularly important to the Town: ²⁸

- **★** Mount Kearsarge State Forest Park
- × Warner Ski Area
- **X** other State Forests and Natural Areas

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Warner. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Warner	Region
First Priority	Recreational trails	Recreational trails
Second Priority	Outdoor sporting fields	Canoe/boat access



Third Priority	Picnic areas and playgrounds	Outdoor sporting fields
Fourth Priority	Beach access	Picnic areas and playgrounds
Fifth Priority	Canoe/boat access	Beach access

Specific comments 31

- **X** Warner just put in a Town beach in 1997.
- X I hope that the Warner Master Plan update will rezone so as to allow for recreational uses in some areas while restricting it in other areas to better protect the Town's important habitats.

Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

campgrounds

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Warner has established both a Conservation Commission and a Historical Society.

<u>Conservation</u> <u>Commission</u>

One of the Conservation Commission's most interesting projects has been the identification of natural resources in the Willow Brook Watershed. They have also created an outreach program that will help educate the public about watersheds and their protection. In 1997, the Commission also hosted the "The Dollars and Sense of Open Space," and organized an "Adopt-A-Salmon" project for the fifth graders at Simonds School.⁸

<u>Historical Society</u>

A private Historical Society exists to help protect Warner's heritage. Recent projects include: studying Warner's cellar holes, stone walls, stone formations, and stone piles; studying the Bagley Covered Bridge; collecting and archiving historic documents and artifacts; and organizing "The Barn Sale," a community fundraiser that helps support the Society.⁸

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Warner's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ the development of map overlays
- updating Warner's Master Plan (a process that should help the Town redirect some energy to environmental issues)
- ✓ securing conservation easements
- ☑ a statewide natural resource inventory of important local watersheds
- ✓ working on the Town beach at Silver Lake

<u>Conservation</u> <u>Activities Planned</u>

or Anticipated Within the Following Three (3) Years

- the Master Plan update
- zoning changes

- forming a capital reserve fund for the conservation commission
- more public education and support
- continuing to inventory important ecological resources (wetlands, watersheds, etc...)

Essential Factors to Warner's "Quality of Life"

- M a desire to protect the environment
- M local community pride
- M a "get involved" attitude
- M understanding the good and bad impacts of residential growth
- M open space

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Warner Zoning Ordinance, 1992
- 7 Town Officials/Employees, 1998
- 8 Warner Town Annual Report, 1997
- 9 Warner Site Plan Review Regulations, 1990
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Warner Master Plan, 1989
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 (reserved)
- 31 Warner Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

WEBSTER

Γ,	Ahout Webster					
	Member of CNHRPC	(
	Surveys Mailed	17				
	Surveys Received for	0				
	REPP Meeting					
	Profile Review &	(

Historical Profile

Webster was originally granted in 1733 as a part of the Town of Boscawen. In 1860, political discontent prompted the residents of East Boscawen to petition to have their part of Town separated and reincorporated. Despite opposition from the Town's west side, the New Hampshire Legislature granted East Boscawen's petition, and 1860 saw the establishment of two new towns. The residents of East Boscawen claimed the land east of Beaverdam Brook and Pond Brook, while West Boscawen received the land to the west and acquired the name "Webster" in honor of Daniel Webster, the famous New Hampshire statesman. Webster was not short-changed in this maneuver. It was able to hold on to many natural and cultural resources including Lake Winnepocket, the Blackwater River, and the Corser Hill historic area. Webster was originally a farming community, but the 1800's brought mills and manufacturing to the area. Webster never became an industrial or agricultural center, and its current residents tend to commute to other places to work. One of the Town's best attributes has been its ability to retain its rural character and colonial charm.1

Present-Day Profile

The area of Webster is 18,048 acres, or 28.2 square miles. The Town comprises 3.5% of the CNHRPC area. 2

Over the last twenty-seven years, Webster's population has grown by 117% while the number of housing units has increased by 77%: 3, 4, 5

GROWTH	Populatio n	Net #	t Change %	Housin g Units	Net #	Change %	
1970 (US Census)	680	na	na	351	na	na	
1980 (US Census)	1095	+ 415	+ 61.1	444	+ 93	+ 26.5	
1990 (US Census)	1405	+ 310	+ 28.3	577	+ 133	+ 30.0	
1997 Population & 1996 Housing (NHOSP)	1478	+ 73	+ 5.2	620	+ 43	+ 7.5	
TOTAL CHANGE FROM		+ 798	+ 117.4%		+ 269	+ 76.6%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: 6

Town Zoning Districts Ordinances

Town-Adopted Resource & Conservation

Residential	Floodplain Development Ordinance
Agricultural	

Non-regulatory measures for protecting Webster's resources include the following: 7, 8, 9

Town Master Plan Elements	Town Conservation Plans, Reports and Studies
Community Profile Element (1992)	Blackwater Project Master Plan (US Army
Goals and Objectives Element (1992)	Natural Resources Inventory (1990)
Land Use and Natural Resources Element	
Conservation and Preservation: Historical and Natural Resources (1992)	
Transportation Element (1992)	
Community Facilities and Services Element (1992)	

TOWN RESOURCES



Water Resources

Water Supplies

The Pillsbury Lake Water Precinct provides 101 dwellings in Webster with public drinking water. The rest of the Town's residents depend on private wells. 14, 32

Between 1983 and 1997, the NHDES has issued 40 well permits to residents of Webster. These new well locations have been mapped by NHDES.¹⁰

Ponds 11, 12, 13, 14, 32

The Blackwater Reservoir is an artificial flood control area that is managed at the Blackwater Dam in Webster. It reduces flooding in residential communities found downstream of the site as well as in some major industrial and commercial areas such as Concord, Manchester, and Lowell Massachusetts. The New Hampshire Department of Resources and Economic Development (NHDRED) oversees a forestry, fish, and wildlife management program on the 3,475 acres of land surrounding the reservoir.

Walker Pond has an area of 190 acres and an average depth of 18 feet and is shared with Boscawen. It formerly served as the public water supply for the Town of Boscawen.

Ox Pond is a small pond that is only eight acres in size and has an average depth of 16 feet.

Trumbull Pond is located in western Webster close to the Warner town line. This 83-acre pond is surrounded by woods.

Lake Winnepocket is a natural lake with an area of 227 acres and a maximum depth of 55 feet. It serves as a tributary to Schoodac Brook. Summer homes are located along its shore.

Pillsbury Lake lies south of Walker Pond, between the Blackwater River and the Boscawen-Webster town line. Homes are situated along its shore also.

Knight's Meadow Marsh is a 35-acre water body that is located in the Town's northwest corner.

Rivers 11, 12, 13, 14, 32

The Blackwater River flows from Salisbury, south for twelve miles through the center of Webster, and into Hopkinton where it converges with the Contoocook River. The Blackwater Reservoir and Blackwater Dam are found along this River, just west of Corser Hill. The river is known for its beauty and its recreation opportunities, making it a popular site for canoeing and the annual kayaking races.

The Warner River flows for a short distance in Webster in the extreme southwest corner of the Town. It also converges with the Contoocook River in Hopkinton.

Brooks 11, 12, 13, 14, 32

Beaverdam Brook forms part of the boundary between Webster and Boscawen. It begins in Salisbury at a small unnamed pond and flows south-easterly until it becomes the Webster town line. It passes through wetlands and then drains into Walker Pond.

Knight Meadow Brook flows through Knight Meadow Marsh in the northwest corner of the Town.

Pond Brook flows out of Walker Pond. It also comprises part of the Webster-Boscawen boundary. Northeast of Pillsbury Lake, the brook turns east and flows into Boscawen.

Deer Meadow Brook flows south out of Pillsbury Lake into Hopkinton.

Schoolhouse Brook drains off the north end of Rattlesnake Hill into Deer Meadow Brook.

Frost's Brook flows off of Corser Hill.

Cold Brook is one of many small brooks that drains into the Blackwater River.

Hydric Soils

Out of the total land acreage of Webster (18,048), only 2.5 % is comprised of hydric soils: ³²

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	0	0
Very Poorly Drained - organic base	383	2.1
Very Poorly Drained - mineral base	67	0.4
Marsh	0	0
TOTALS	450	2.5%

Watersheds

The Town lies within three major watersheds. The Contoocook River watershed underlies the eastern part of the Town. A central strip of land lies within the Blackwater River watershed, and the western part of the Town falls inside the Warner River watershed. The Beaverdam Brook watershed feeds Walker Pond, which lies half in Webster and half in Boscawen. ^{10, 32}

Aquifers

An important stratified drift aquifer underlies the Blackwater River. It starts at Snyders Mill and extends south for about one mile. There are no high yield aquifers in Webster. ^{16, 32}

Wetlands

Wetlands inventoried, field-checked, and mapped by the US Fish and Wildlife Service between 1986 and 1990 dot the entire Town. Large areas of mapped wetlands which do not co-occur with ponds are found along Beaverdam Brook, the Blackwater River, and north of Pillsbury Lake. ^{17, 32}

Identified Water Resource Priorities

The 1990 Webster Natural Resources Inventory named the following water resources as being particularly important to the Town: ³²

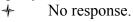
- → aquifers
- → Walker Pond and the Beaverdam Brook watershed
- → Lake Winnepocket
- → Pillsbury Lake
- ★ The Blackwater River

Survey Findings

As no surveys answered on behalf of Webster were received, the general resource priorities of other community's respondents of the CNHRPC Region are displayed: ³¹

RESOURCE PRIORITIES	Webster Region	
First Priority	no response	Rivers and streams
Second Priority	no response	Aquifers
Third Priority	no response	Lakes and ponds
Fourth Priority	no response	Designated prime wetlands
Fifth Priority	no response	Watersheds

Specific comments included: 31





2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1997, was calculated to be approximately 90% of the entire Town. The following table breaks down the components: 8, 20, 21, 22, 32

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Blackwater Reservoir (portion in Webster)	US Army Corps	1194
Boscawen Town Forest (small portion in Webster)	Boscawen	0
Community Park & School	Town	20
Corn Hill Road/Huntoon Bog Pond Land	NH F&G	18
Cummings easement	Town	141

Fifield Waterfowl and Wildlife Management Area	NH F&G	9
Fisher Parcel	Town	6
Gaskell Park	Town	0
Janeway #2 easement	Town	7
Janeway #3 easement	Town	19
Janeway #4 easement	Town	8
Kimball Lot Wildlife Management Area	NH F&G	18
Knights Meadow Marsh WMA	NH F&G	107
Leonard WMA	NH F&G	855
Old Dump	Town	7
Paul Mock Memorial Forest	Town	59
Phelps easement	Town	13
Pillsbury Lake Boat Access	NH F&G	1
Pillsbury Lake Wildlife and Hunting Area	Town	316
Prince Pasture	SPNHF	92
Riggs easement	Town	16
Riverdale Sanctuary	Town	51
Rockefeller easement	Town	268
Schildbach easement	Town	20
Swetts Mill Island	Town	1
Talbot Conservation Easement (Bashan Road)	Town	56
Victor easement	Town	200
Walker Pond Conservation Land	Town	35
Waterfowl and Wildlife Management Land	NH F&G	82
William Pearson Park	Town	3
Woodman Forest	Town	93
Current U	Jse	12,452
TOTAL ACREAGE PROTECTED		16167

In 1998, Webster did not support a land use change tax allocation to be directed to the Conservation Fund for additional land acquisition. 23

Identified Land & Forestry Resource Priorities

The 1990 Webster Natural Resources Inventory named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 hay fields
- 2 corn fields
- 2 farms on Little Hill, Battle and Pleasant Streets, along the Blackwater River, and on Deer Meadow Road
- 2 tree farms

Survey Findings

As no surveys answered on behalf of Webster were received, the general resource priorities of other community's respondents of the CNHRPC Region are displayed: ³¹

RESOURCE PRIORITIES	Webster	Region
First Priority	no response	Open space
Second Priority	no response	Agricultural land
Third Priority	no response	Conservation easements
Fourth Priority	no response	Town parks and forests
Fifth Priority	no response	Deeded conservation lands

Specific comments included 31

2 No response





Historical and Cultural Resources

National Register of Historic Places

Webster has two exemplary sites located on the National Register, both of which were nominated and listed in 1985. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing in the Register recognizes the significance of and encourages the stewardship of the property: 1, 24

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
Old Webster Meeting House	3/85	on Battle Street, off of NH Route 127	This old Meeting House belonged to the residents of West Boscawen even before the NH Legislature incorporated the town of Webster in 1860. It was remodeled at the beginning of this century.
Webster Congregational Church	3/85	on Long Street, off NH Route 127	

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place. Webster currently has no historic sites listed with the New Hampshire Division of Historic Resources.²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1,8

- The Corser Hill Meeting House is a beautiful example of a 19th century church. Built in 1823 by George T. Pillsbury, the church features well-designed towers and a striking "Venetian" window.
- Cook's Cabin on Cook's Hill off of Mutton Road belonged to Thomas Cook, one of Webster's earliest residents. A few flat rocks, perhaps used as floor tiles, still lie here.
- Fowler's Plain is a level parcel of land located east of Corser Hill and west of Beaver Dam Brook. It was a popular site for regimental musters.
- An abandoned sluiceway and mill are located along the Blackwater River.

Covered Bridges

Covered bridges once played an integral part of the transportation network of the 19th century. Today, they are recognized for their beauty and uniqueness. Although Webster no longer has standing covered bridges, six once existed: ²⁶

COVERED BRIDGE NAME/LOCATION	Date Built	Date Gone
Burbank	unknown	1936
Bashon	unknown	1907
Clothespin	unknown	1936
Snyder	unknown	1951
Swetts Mill	unknown	1909
Danville, road to Tyler	unknown	unknown

Cemeteries

As do many other small Central Region towns, Webster has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link. Webster has four Town cemeteries: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Beaver Dam Cemetery	Town	near Beaverdam Brook, south off Long Street
Town Cemetery	Town	east off Allen Street
Town Cemetery	Town	between Allen Street and Pleasant Street
Town Cemetery	Town	along the Blackwater River, south of Snyders Mill

Identified Historical Resource Priorities

The 1990 Webster Natural Resources Inventory mentioned that the following general and specific historical and cultural resources are of extreme importance to the Town: ³²

- a cellar holes
- Native American sites
- Old Webster Meeting House

Survey Findings

As no surveys answered on behalf of Webster were received, the general resource priorities of other community's respondents of the CNHRPC Region are displayed: ³¹

RESOURCE PRIORITIES	Webster	Region
First Priority	no response	Cemeteries
Second Priority	no response	Cultural interest sites
Third Priority	no response	Covered bridges
Fourth Priority	no response	National Register of Historic Places
Fifth Priority	no response	Archaeological sites

Specific comments 31

No response



B Ecological Resources

NH Natural Heritage Inventory

Several outstanding plant and animal species have been located in Webster since the 1930's and recorded NHI program's database. ²⁷

Arethusa (arethusa bulbosa) is endangered in the State, but is not listed as such federally. Webster is one of only seven New Hampshire towns that has reported harboring this plant species within the last twenty years.

The elusive Pied-Billed Grebe (Podilymbus podiceps) is listed as endangered in the State and has been reported in Webster once within the last 20 years.

The Spotted Turtle (Clemmys guttata) has been noted as a reptile of extremely high importance in New Hampshire. Webster has reported the species at one location during the last twenty years.

The vertebrate Blanding's Turtle (Emyodoidea blandingii), not a native species to New Hampshire, has been seen at one location in Webster within the last 20 years.

Two rare Noctuid Moths (Eucoptocnemis fimbriaris and Euxoa pleuritica) were reported in Webster at one time, but neither species has been seen in the Town recently.

Frosted Elfin (Incisalia irus) is an insect that has been listed as endangered in the State of New Hampshire. Only five locations have reported this species in the State during the last 20 years. Webster has reported this insect in the past, but not in recent history.

The invertebrate Graceful Clearwing (Hemaris gracilis) has only been seen at four locations in the State during the last twenty years, one such location in Webster.

The Karner Blue Butterfly (Lycaeides melissa samuelis) is listed as endangered both in the State and throughout the country. Only four Karner Blue populations have been recorded in the State within the last twenty years. Webster reported this species in the past, but not in recent history.

The Phyllira Tiger Moth (Grammia phyllira) and the Pinion Moth (Xylena thoracica) are two moth species that were found in Webster at one time, but not in recent history. Each species has been seen at only three New Hampshire locations during the last twenty years.

Pine Devil (Citheronia sepulcralis) is a rare insect that was found in Webster at one time. It has only been seen at one New Hampshire location during the last twenty years.

The Spiny Oakworm (Anisota stigma) is an insect that has been seen at only one location in the State, in Webster, within the last twenty years.

The Cora Moth (Cerma cora) is yet another a rare species that has only been reported in New Hampshire only one time, in Webster, during the past twenty years.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Webster: ^{15, 18, 19, 32}

A large riparian corridor is located along the Blackwater River which flows south from Salisbury, through the center of Webster and into the Contoocook River. In the North, the river is surrounded by conservation lands.

An important power line corridor runs along the eastern side of the Town, parallel to the Webster-Boscawen town line. Many animal species use this utility corridor to facilitate traveling from one place to another. This corridor is assumed to be especially well-traveled because it passes by ponds and crosses through wetlands.

Deeryards and bear trails have been noted on Little Hill.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Webster: ³²

Dingit Corner is comprised of Huntoon Pond and Ike Waldron Pond. This bog area supports a wide variety of freshwater wetlands species including: sphagnum moss, leatherleaf, pitcher plants, orchids, small mammals, and fish.

Common Loons are a threatened species that have been seen at Walker Pond and Lake Winnepocket.

Webster's most ecologically-rich wetlands occur between Couch Pond and Walker Pond. Many wildlife species have been seen or heard in this marshy area including: beaver, bobcat, otter, fisher, weasel, moose, owls, hawks, and ospreys.

Scenic Roads and Vistas

Mutton Road, Call Road, Gerrish Road, and Bashan Road all offer scenic views of Webster's rural farmland. Little Hill offers views of Warner's Mt. Kearsarge, and on clear days the Presidential Range can also be seen. Other spectacular vistas can be seen from Lake Winnepocket, from Knights Meadow Marsh, and from Corser Hill.³²

Identified Ecological Resource Priorities

The 1980 CNHRPC Open Space Plan named the following ecological resources as being particularly important to the Town: ¹⁸

B Knights Meadow

- B Schoodac Brook
- B Walker Pond
- B Dingit Corner
- B Wildlife Management Areas

Survey Findings

As no surveys answered on behalf of Webster were received, the general resource priorities of other community's respondents of the CNHRPC Region are displayed: ³¹

RESOURCE PRIORITIES	Webster	Region
First Priority	no response	Scenic vistas
Second Priority	no response	Plant/tree communities (tied w/3rd)
Third Priority	no response	Greenway corridors (tied w/2nd)
Fourth Priority	no response	Riparian corridors
Fifth Priority	no response	Biological diversity

Specific comments 31

B No response



1 Geologic Resources

Surficial Geology

A few stratified gravel and gravel deposits lie in kames and kame terraces located in the southern section of the Town in the land surrounding the Blackwater River. Organic deposits and outwash plains appear in various wetland areas. ¹²

Additional and perhaps more recognizable geologic formations are mountains and hills: 14,28

MOUNTAINS AND HILLS	Elevation
Chase Hill	660'
Corser Hill	840'
Littles Hill	800'
Ox Pond Hill	740'

Putney Hill	740'
Round Hill	840'

Bedrock Geology

Approximately ½ of Webster is underlain by an unnamed pluton composed of Granodiorite-Biotite and Granodiorite-Biotite Quartz Monzonite (mostly quartz, some garnet). The remaining half of the Town is divided between an unnamed pluton of Kinsman Quartz Monzonite, and the Littleton Formation of Undifferentiated Schists and Gneisses, which is comprised mostly of gray mica. ^{12, 14}

Identified Geological Resource Priorities

The 1980 CNHRPC Open Space and Recreation Plan named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 sand and gravel ridges
- 1 glacial erratics

Survey Findings

As no surveys answered on behalf of Webster were received, the general resource priorities of other community's respondents of the CNHRPC Region are displayed: ³¹

RESOURCE PRIORITIES	Webster	Region
First Priority	no response	Mountains and hills
Second Priority	no response	Soils identification
Third Priority	no response	Sand and gravel deposits
Fourth Priority	no response	Bluffs



|--|

Specific comments 31

1 No response

X

Recreational Resources

A variety of recreational opportunities and resources exist in Webster that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Paul P. Mock Memorial Forest	public		59 acres
Riverdale Sanctuary	private		51 acres
Pillsbury Lake Wildlife and Hunting Area	public	by Pillsbury Lake	300 acres
Leonard Wildlife Management	public	between Knight Meadow Brook and the Warner town line	855 acres
Community Park & School	public		20 acres
Knights Meadow Marsh WMA	public	between Knight Meadow Brook and the Warner town line	119 acres
Kimball Lot Wildlife Management Area	private	off Corn Hill Road	18 acres
Blackwater Reservoir, dam, hiking trails, and picnic area	public	north-central section of Town	1194 acres
Gaskell Park	public	off Tyler Road, south of Snyders Mill, by the Blackwater River	
Prince Pasture			92 acres
Pillsbury Lake boat launch and beach	public	Pillsbury Lake	1 acre
Cold Brook Camping Area			
Cloverdale Riding Stable			

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

X No response

Survey Findings

As no surveys answered on behalf of Webster were received, the general resource priorities of other community's respondents of the CNHRPC Region are displayed: ³¹

RESOURCE PRIORITIES	Webster	Region
First Priority	no response	Recreational trails
Second Priority	no response	Canoe/boat access
Third Priority	no response	Outdoor sporting fields
Fourth Priority	no response	Picnic areas and playgrounds
Fifth Priority	no response	Beach access

Specific comments 31

X No response



Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to the Town: ¹⁸

No response

ACTIVE RESOURCE PRESERVATION COMMITTEES

In order to more adequately protect these finite natural and historical resources, Webster has established a Conservation Commission.

Conservation Commission

Recent activities of the Conservation Commission include: painting and blazing the boundaries of all of the Town's conservation easements, and working to understand and to minimize the impacts of new developments near a wooded swamp on Pillsbury Lake.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Webster's responses to the natural, cultural, and historical resources survey:

Conservation Activities Undertaken Within the Last Three (3) Years

✓ No response

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

No response

Essential Factors to Webster's "Quality of Life"

M No response

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Webster Zoning Ordinance, 1998
- 7 Town Officials/Employees, 1998
- 8 Webster Town Annual Report, 1997
- 9 Webster Site Plan Review Regulations, 1993
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Webster Master Plan, 1992
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 NH Association of Conservation Commissions, 1998
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1997
- 30 (reserved)
- 31 (reserved)
- 32 Webster, NH Natural Resources Inventory, 1990

WILMOT

Ahout Wilmot	
Member of CNHRPC	✓
Surveys Mailed	12
Surveys Received for Tallying	4
REPP Meeting Participation	✓
Profile Review & Comment by	×

Historical Profile

In the early years of the 18th century, residents of North New London and Kearsarge Gore presented a signed petition to the Legislature to incorporate portions of both settlements plus the land separating the two into a new town called Wilmot. As a result, in 1807 the Legislature granted the incorporation of Wilmot, an 18,357 acre plot of land with many hills and valleys. In 1832, the Town more than doubled in acreage when New Chester was annexed adding approximately 30,000 acres to Wilmot. The first Town Meeting was held on March 11, 1808 with 46 attendees in the home of James Philbrick. Over the next forty years, the population grew rapidly from 423 in 1810 to 1,272 in 1850. The population in 1850 is the highest it has ever been and is still far higher than the population of Wilmot today. Farming was the chief industry in the early years of Wilmot; later, a woolen mill and a tannery were located in the Wilmot Flat area. Between 1850 and 1950, the population dwindled to 370 as many residents and families relocated to larger towns and cities. Wilmot has preserved much of its rural character and it offers, at times, scenes of bears promenading in backyards! ¹

Present-Day Profile

The area of Wilmot is 47,040 acres, or 73.5 square miles. The Town comprises 9.1% of the CNHRPC area ²

Over the last twenty-seven years, Wilmot's population has grown by 93% while the number of housing units has increased by 94%: ^{3, 4, 5}

GROWTH	Population	<u>Net (</u> #	Change %	Housing Units	Net C	<u>Change</u> %	
1970 (US Census)	516	na	na	258	na	na	
1980 (US Census)	727	+ 211	+ 40.1	397	+ 139	+ 53.4	
1990 (US Census)	935	+ 208	+ 28.6	458	+ 61	+ 15.4	
1997 Population & 1996 Housing (NHOSP)	998	+ 63	+ 6.7	500	+ 42	+ 9.2	
TOTAL CHANGE FROM 1970 - 1997		+ 482	+ 93.4%		+ 242	+ 93.8%	

In an effort to control its growth, while protecting its resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the conservation process: ⁶

Town Zoning Districts	Town-Adopted Resource & Conservation Ordinances
Residential District	
Village District	
Commercial District	

The Planning Board is undertaking a comprehensive Zoning Ordinance update which will be presented at Town Meeting in 1999.

Non-regulatory measures for protecting Wilmot's resources include the following: ^{7, 8, 9}

Town Master Plan Elements

Town Conservation Plans, Reports and Studies

Population, Economics, and Commercial Activity (1996)	
Natural Resources and Land Use (1996)	
Recreation and Community Facilities (1996)	
Housing (1996)	
Transportation (1996)	

TOWN RESOURCES



Water Resources

Water Supplies

Between 1983 and 1997, the NHDES has issued 40 well permits to residents of Wilmot. These new well locations have been mapped by NHDES. ¹⁰

Ponds 11, 12, 13, 14

Piper Pond is a 39-acre pond located in the northwest region of Wilmot. This pond has a maximum sounded depth of 15 feet.

Tannery Pond is located in the south-central portion of Wilmot adjacent to Chase Pond. Tannery Pond is 16 acres in area and has an average depth of five feet.

White Pond is a 15-acre pond with an average depth of nine feet. White Pond is located in the north-central portion of Wilmot.

Eagle Pond is one of Wilmot's largest ponds with an area of 37 acres. This pond is located in east-central Wilmot in a region which juts out from the rest of the Town.

Butterfield Pond is 15 acres in area with a maximum sounded depth of 23 feet. This pond is located in northwest Wilmot.

Chase Pond is located near Tannery Pond in south-central Wilmot. This pond, also one of the largest ponds in Town, ties Eagle Pond with an area of 37 acres. The maximum sounded depth was 14 feet.

Rivers 11, 12, 13, 14

There are no rivers that flow adjacent to Wilmot or within the Town boundaries.

Brooks 11, 12, 13, 14

Kimpton Brook flows into the northwest portion of Wilmot from Springfield. Kimpton Brook flows southeasterly from the Town's western border to Andover. Then the brook turns northward and flows back into Wilmot and into Eagle Pond.

Casey Brook flows from central Wilmot southward a few miles where it empties into Tannery Pond.

Whitney Brook enters Wilmot from New London and then travels about a mile into Chase Pond.

Cascade Brook flows in a southwesterly direction from Tannery Pond in Wilmot. The brook travels a little more than mile before it enters New London.

Hydric Soils

Out of the total land acreage of Wilmot (47,040), only 3% is comprised of hydric soils: 14,32

HYDRIC SOILS	Acreage	Total Percentage of Town
Poorly Drained	875	1.9
Very Poorly Drained - organic base	332	.7
Very Poorly Drained - mineral base	99	.2
Marsh	110	.2
TOTALS	1416	3.0

Watersheds

The Town is over 90% encompassed within the Blackwater River watershed. Only the northern most tip, where Wilmot abuts Springfield, Grafton, and Danbury, falls within the Smith River watershed. ¹⁰

Aquifers

A large aquifer underlies the entire central section of Town. A smaller aquifer can be found under Eagle Pond and its surrounding area. Other aquifers within Town underlie miscellaneous wetlands in northern Wilmot and along Kimpton Brook. ¹⁶

Wetlands

The wetlands in Wilmot lie exclusively within the top 3/4 of Town. The more prominent wetlands surround the Piper, Butterfield, Eagle and White Ponds. Many others occur along Kimpton, Cascade, and Cassey Brooks. Only a few scattered wetlands do not co-occur with water bodies. ¹⁷

Identified Water Resource Priorities

Town officials and volunteers have named the following water resources as being particularly important to the Town: ¹⁸

- → Eagle Pond
- → wetlands
- ★ Kimpton Brook and its chain of marshes
- → The Cascade

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Wilmot. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Wilmot	Region
First Priority	Rivers and streams	Rivers and streams
Second Priority	Designated prime wetlands	Aquifers
Third Priority	Aquifers	Lakes and ponds
Fourth Priority	Lakes and ponds	Designated prime wetlands
Fifth Priority	Shorelands and wetlands	Watersheds

Half of the respondents felt that the Town's ordinances and regulations adequately protect their water resources, while half disagreed. ³¹

Specific comments included: 31

- We need to update our wetlands map and we should create a wetlands overlay district.
- ★ We need more public education.
- → In general, we need to upgrade



our resource protection policies.

2 Land and Forestry Resources

The total number of acres under conservation, including current use lands as of December 31, 1996, was calculated to be approximately 54% of the entire Town. The following table breaks down the components: ^{8, 20, 21, 22}

CONSERVATION LANDS & CURRENT USE	Held by	Acres
Abrams/Lecaroz + Gareau	Town	12
Bog Mountain WMA	NH F&G	304
Chase Pond Town Beach	Town	1
Florence Langley Park	private	0
French #1 easement	Town	467
Gile State Forest	NH DRED	6675
Hall #1 easement	Town	7
Hall #2 easement	Town	151
Langenau Forest	SPNHF	168
Little League field	Town	2
Mount Kearsarge State Forest (portion in Wilmot)	NH DRED	2011

Ragged Mountain Conservation Easement	NH DRED	695
Ragged Mountain Fish & Game Club	Town	976
Ray #1 easement	Town	82
Ray #2 easement	Town	81
Spearman easement	Town	3
Timmy Patten Park	private	0
Waite easement	Town	38
Webb easement	Town	950
White Pond	NH F&G	1
Current Use (1996)		12,849
TOTAL ACREAGE PROTECTED		25473

Identified Land & Forestry Resource Priorities

Town officials and volunteers have named the following land and forestry resources as being particularly important to the Town: ¹⁸

- 2 agricultural lands
- 2 orchards
- 2 State Parks
- 2 scenic vistas

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Wilmot. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other communities' respondents in the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Wilmot	Region
First Priority	Open space	Open space
Second Priority	Conservation easements	Agricultural land
Third Priority	State parks and forests	Conservation easements
Fourth Priority	Agricultural land	Town parks and forests
Fifth Priority	Town parks and forests	Deeded conservation lands

The majority of the respondents felt that the Town's ordinances and regulations do not

adequately protect their land and forestry resources. 31

Specific comments 31

- We need to create an Agricultural/Residential zoning district.
- 2 The Town would benefit from an open space overlay district.
- We should encourage conservation easements, and we should create a Conservation Commission.
- We need more public education



concerning our land and forestry resources.



Historical and Cultural Resources

National Register of Historic Places

Wilmot has one exemplary site located on the National Register. No additional regulative restrictions are placed upon those properties which are listed on the National Register, but instead a listing recognizes the significance of and encourages the stewardship of the property: ¹, ²⁴

NATIONAL REGISTER OF HISTORIC PLACES	Date Listed	Location	Significance/Description
North Wilmot Union Meeting House	2/89	Junction of Breezy Hill and Piper Pond Roads	

New Hampshire Historical Markers

These markers stand at places of great historical significance to the State of New Hampshire. Some of these places contain tangible reminders of the past, while others mark the locations of where structures once stood or a historical event took place.

One of the most well-known historical sites in Wilmot is Mason's Patent. In 1629, the English Crown granted New Hampshire to Captain John Mason. The area he received was bounded by a curved line 60 miles from the sea. This curved line called the "Masonian Curve", travels near the Springfield-Wilmot town line. ²⁵

Local markers, or the actual remnants of the structures themselves, indicate the sites of various other, yet not less important, historic landmarks and events: 1, 8, 18

- Morril/Tewksbury mill site
- Samuel Sterns saw mill site
- Charles Comey mill site
- Dodge mill site
- grist mills
- Johnson & Colby woolen mill site
- Thompson & Nettleton sawmill and tannery site
- Soldiers Monument

Covered Bridges

There are no records of any covered bridges being located in Wilmot. ²⁶

Cemeteries

As do many other small Central Region towns, Wilmot has a rich heritage and a strong connection to its past. Cemeteries, both Town and small, private family plots, are an important and personal link: ^{8, 18}

CEMETERIES	Owner	Parcel Number / Location
Carr Hill Cemetery	Town	
Stearns Cemetery	Town	west of White Pond
Eagle Pond Cemetery	Town	north of Eagle Pond
Pine Hill Cemetery	Town	south of Tannery Pond
White Pond Cemetery	Town	near White Pond
North Road Cemetery	Town	North Wilmot
Thompson Family Cemetery	private	between Routes 11 and 4A
Church Cemetery	Town	east of Tannery Pond
Tewksbury Cemetery	Town	
Bunker Hill Cemetery	Town	central Wilmot

Identified Historical Resource Priorities

Town officials and volunteers have named the following general and specific historical and cultural resources as being particularly important to the Town: ¹⁸

- Wilmot's many saw mills
- grist mill located in central Wilmot off Route 11
- atannery located just east of Tannery Pond
- woolen mill site located near New London on Route 11
- cemeteries
- Stearns School
- old house located on Route 4A in Central Wilmot
- Town Office building
- Wilmot's many historic mines
- Wilmot Village Center

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Wilmot. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the

general resource priorities of other communities' respondents in the CNHRPC Region: 31

RESOURCE PRIORITIES	Wilmot	Region
First Priority	Cemeteries	Cemeteries
Second Priority	Mill sites	Cultural interest sites
Third Priority	Cultural interest sites	Covered bridges
Fourth Priority	National Register of Historic Places	National Register of Historic Places
Fifth Priority	Unique stone walls	Archaeological sites

The majority of respondents felt that the Town's ordinances and regulations do not adequately protect their historical and cultural resources. ³¹

Specific comments 31

Cemeteries seem to be sufficiently protected, but we need to convince private landowners to be more concerned about the historic mills sites, stone walls, and cellar holes located on their properties.

Ordinances should be created to

better protect our unique historic features.

B Ecological Resources

NH Natural Heritage Inventory

One outstanding plant species has been located in Wilmot since the 1930's. ²⁷

The Slender Blue Flag, *Iris primatica*, has been located once in Wilmot. This rare plant is listed as threatened in the State of New Hampshire, but is not listed as such on the federal register. It has only been located in the State eight other times.

Corridors

Corridors and greenways are typically used not only by people for recreation or transportation, but also by wildlife to travel from one habitat to another. Maintaining viable and undeveloped corridors ultimately measures the biological success of the animals, particularly larger mammals, within an area. The following corridors have been identified in Wilmot: 15, 18 19

A small railroad corridor travels through the eastern-most portion of Wilmot. Railroad corridors create a unique habitat for plant, animal, and insect species to live in and also create an uninhibited travel corridor for movement.

A utility line corridor cuts east-west through the center of Wilmot. Utility line corridors create similar habitats for organisms as the railroad corridors.

Exemplary Natural Communities

Other special, undisturbed lands are essential for the biological diversity of plants and animals. The more bio-diversity found within an area, the more valuable and self-sustaining the community becomes from both ecological and economic perspectives. The following natural communities have been identified in Wilmot: ¹⁸

Wilmot has several very large plots of undisturbed lands which have been preserved as conservation lands.

One plot exists in the west-central portion of Wilmot. This plot consists of many acres of land including a fairly large pond and several streams.

Another in central east Wilmot lies adjacent to Eagle Pond. It encompasses streams and hilly terrain

The largest uninterrupted parcel of conservation land lies in the southern most portion of Wilmot. This area is called Winslow State Park and is part of Mount Kearsarge State Forest. This area contains several thousand acres of continuous conservation land. This land contains plains, ponds, forests, hills, and a part of Mount Kearsarge.

Scenic Roads and Vistas

A scenic vista is located south of Old Winslow Road. This scenic vista offers spectacular views of Mount Kearsarge and Winslow State Park. ¹⁴

Identified Ecological Resource Priorities

Town officials and volunteers have named the following ecological resources as being particularly important to the Town: ¹⁸

- B Scenic Vista south of Old Winslow Road
- B Mount Kearsarge State Forest and Winslow State Park
- B Wetland habitats

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Wilmot. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community's respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Wilmot	Region
First Priority	Scenic vistas	Scenic vistas
Second Priority	Greenway corridors	Plant/tree communities (tied w/3rd)
Third Priority	Biological diversity (tied)	Greenway corridors (tied w/2nd)
Fourth Priority	Animal communities (tied)	Riparian corridors
Fifth Priority	Plant communities, Deeryards, and Riparian corridors (3-way tie)	Biological diversity

The majority of the respondents felt that the Town's ordinances and regulations do not adequately protect their ecological resources. ³¹

Specific comments 31

- B The Town should identify our ecological protection needs and incorporate them into an ordinance.
- B The establishment of a prioritize and protect our ecological



Conservation Commission would help us to resources.

1 Geologic Resources

Surficial Geology

While the lowest elevation lies at 650' around Eagle Pond, the highest elevation of the side of Mount Kearsarge is found to be 2,937'. These are the exceptions rather than the rule, however, as most of the land area of Wilmot lies on slight to moderately steep slopes. 14,28

MOUNTAINS AND HILLS	Elevation
Bannock Hill	
Eagles Nest	1473'
Farnum Hill	1541'
Stearns Hill	1623'
Old English Hill	1538'
Bog Mountain	1787'
Philbrick Hill	1622'
Emery Hill	1581'
Cross Hill	1084
Mount Kearsarge (peak in Warner)	2752

Jones Hill	1473'
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Identified Geological Resource Priorities

Town officials and volunteers have named the following geologic resources as being particularly important to the Town: ¹⁸

- 1 variety of gorges and eskers
- 1 glacial erratics
- 1 Bog Mountain
- 1 Davenport garnet mine
- 1 Currier mica mine
- 1 Powell mine
- 1 Wetherbee Prospect
- 1 Wilmot mine
- 1 North Star mine
- 1 Mount Kearsarge

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Wilmot. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community's respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Wilmot	Region
First Priority	Mountains and hills	Mountains and hills
Second Priority	Gorges	Soils identification
Third Priority	Mining sites	Sand and gravel deposits
Fourth Priority	Eskers	Bluffs
Fifth Priority	Sand and gravel deposits and Bluffs (both tied)	Gorges

The majority of respondents felt that the Town's ordinances and regulations do not adequately protect their geologic resources. ³¹

Specific comments 31

- 1 We should identify our geologic protection needs and incorporate them into an ordinance.
- It is hard to recommend new protection policies seeing as many of the Town's geologic features lie on private property.



X Recreational Resources

A variety of recreational opportunities and resources exist in Wilmot that are closely associated with the previous resources stated earlier in this narrative. In addition, there are several others deserving of attention: ^{18, 29, 30}

PUBLIC & PRIVATE RECREATION	Туре	Location	Acreage / Miles
Mount Kearsarge State Forest	public	South Wilmot	1,511 acres
Gile State Forest	public	south of Piper Pond, by the Springfield town line	195 acres
Eagle Pond Campground	private	off Route 4	127 acres
Camp Wilmot	private	White Pond	158 acres
Little League Field	public		2 acres
White Pond	public	North Central Wilmot	1 acre
Bog Pond Mountain Wildlife Management	public		304 acres
Florence Langley Park	public		
Langenau State Forest	public	near the New London-Wilmot town line	168 acres
Town Beach	public	Chase Pond	1 acre

Identified Recreational Resource Priorities

Town officials and volunteers have named the following recreational resources as being particularly important to the Town: ¹⁸

- **★** Florence Langley Park
- **★** Mount Kearsarge State Park

Survey Findings

The following table documents the general resource priorities of those who returned surveys from the Town of Wilmot. Although the results are not statistically significant, they do give an indication of what is most important to the community. The responses are compared with the general resource priorities of other community's respondents of the CNHRPC Region: ³¹

RESOURCE PRIORITIES	Wilmot	Region	
First Priority	Recreational trails	Recreational trails	
Second Priority	Canoe/boat access (tied)	Canoe/boat access	
Third Priority	Outdoor sporting fields (tied)	Outdoor sporting fields	
Fourth Priority Beach access		Picnic areas and playgrounds	
Fifth Priority Picnic areas and playgrounds		Beach access	

The majority of respondents felt that the Town's ordinances and regulations do not adequately protect their public facility resources. ³¹

Specific comments 31

x no other comments were

provided



Other Identified Resource Priorities

Town officials and volunteers have named the following other resources as being particularly important to Wilmot: ¹⁸

many local farms

ACTIVE RESOURCE PRESERVATION COMMITTEES

Wilmot is the only Town within the Central New Hampshire Planning Region which does not have a Conservation Commission. Several attempts at Town Meeting to create such a Commission have already been undertaken, and many diligent supporters of a Conservation Commission will continue their efforts to see that one is established.

Historical Society

Wilmot has a private Historical Society which helps protect the Town's heritage. Recent activities and interests include inventories of cemeteries and historic buildings.

ADDITIONAL SURVEY FINDINGS

The following results have been also compiled from Wilmot's responses to the natural, cultural, and historical resources survey: ³¹

Conservation Activities Undertaken Within the Last Three (3) Years

- ☑ the creation of greenway hiking trails
- enacting a cluster zoning ordinance with conservation and environmental protection requirements

Conservation Activities Planned or Anticipated Within the Following Three (3) Years

- the improvement of hiking trails
- more environment and conservation education
- re-designing the Town's zoning ordinance

Essential Factors to Wilmot's "Quality of Life"

- M the Town's quiet, rural character
- M Wilmot's size and basic desire to remain rural (no more than moderately developed)
- M more public education in regard to changes in Wilmot

REFERENCES

- 1 CNHRPC: Historical Overview, 1976
- 2 CNHRPC Regional Master Plan: Land Use Element, 1991
- 3 US Census STF1A and STF3A, 1970, 1980, & 1990
- 4 NH Office of State Planning: Current Estimates and Trends in NH's Housing Supply 1996, 1997
- 5 NH Office of State Planning: Population Estimates of NH Cities and Towns (1997), 1998
- 6 Wilmot Zoning Ordinance, 1992
- 7 Town Officials/Employees, 1998
- 8 Wilmot Town Annual Report, 1996
- 9 Wilmot Site Plan Review Regulations, 1987
- 10 NH Department of Environmental Services, Water Resources Division, 1998
- 11 NH Fish and Game: Biological Survey of the Lakes and Ponds in Survey Report 8c, 1970
- 12 CNHRPC: Natural Resources Inventory, 1974
- 13 Inventory of Merrimack County Lakes and Ponds, 1968
- 14 Wilmot Master Plan, 1996
- 15 NH Geographically Referenced and Information Transfer (GRANIT) System, 1998
- 16 US Geological Survey (Bow, NH): Bedrock Geology Mapping, 1998
- 17 US Fish and Wildlife Service: National Wetlands Inventory, 1986-1990
- 18 Town Officials (anecdotal), 1998
- 19 NH Office of State Planning: Comprehensive Statewide Trails Study, 1997
- 20 Society for the Protection of NH Forests, 1998
- 21 LCIP Final Report, 1993
- 22 State of NH: Real Property Summary, 1995
- 23 (reserved)
- 24 NH Division of Historical Resources: Historical New Hampshire, 1990
- 25 NH Division of Historical Resources: Historical Markers, 1989
- 26 NH Department of Transportation: Covered Bridges of the Past, 1994
- 27 NH Department of Revenue and Economic Development: NH Natural Heritage Inventory, 1998
- 28 CNHRPC: Open Space Plan, 1980
- 29 NH Office of State Planning: Recreation Plan, 1998
- 30 (reserved)
- 31 Wilmot Survey Results, 1998
- 32 Merrimack County Conservation District: Inventory of Soil Erosion and Agricultural Waste, 1979

Future Directions in Resource Protection

Preliminary identification of natural, cultural, and historical resources within each Central Region municipality has been completed. With the production of this *Inventory* comes the challenge of using the information it contains to protect the Region's resources. Different avenues to pursue are accessible to the individual or to the local municipal board, more so than in previous years. Since the early 1990's, increasing attention has been drawn to New Hampshire's dwindling resources in relation to its growing population. An exercise of defining a municipality's goals and objectives for resource protection will greatly assist in the process of enacting the most appropriate conservation measures.

Sample General Resource Protection Goals and Objectives for Municipalities

The following list, by no means exhaustive, offers ideas for goals that municipalities may want to consider in their Master Plan. These very basic goals require a number of objectives in order to adequately be served.

- Goal 1 Conserve Important Natural Resources
- Goal 2 Conserve and Celebrate Historic and Cultural Resources
- Goal 3 Preserve Rural Character and Scenic Beauty
- Goal 4 Preserve and Enhance Open Space
- Goal 5 Preserve Existing Agricultural Land
- Goal 6 Plan Development to Limit Sprawl and Target Growth in Appropriate Areas
- Goal 7 Provide Adequate Recreational Opportunity
- Goal 8 Anticipate and Plan for Population Growth
- Goal 9 Promote Wise and Efficient Use of Water and Air

A variety of methods, varying in complexity, are available to protect a community's natural, cultural, and historical resources. In order to achieve the best possible protection for identified resources, a combination of several options, both regulatory and non-regulatory, are highly encouraged. Listed below is a sampling of potential objectives that can be undertaken to achieve the above long-term goals of municipal resource stewardship and protection.

Producing Municipal Resource Inventories

The creation of a municipality's own **Natural Resources Inventory** will greatly enhance the preservation opportunities of its resources. A *Natural Resources Inventory*, by Phil Auger of the Rockingham County UNH Cooperative Extension and Jeanie McIntyre of the Upper Valley Land Trust, outlines clearly and concisely the processes to undertake and the types of resources to catalogue. An inventory, which is statutorily required by RSA 36-A, can be incorporated into the Master Plan and officially recognized as an integral part of the future planning priorities of the municipality.

A separate component of the Master Plan, the **Water Resources Management Plan**, is described under RSA 4-C:22. As a sub-component of the conservation and preservation section of the Master Plan, the Water Resources Management Plan (WRMP) is intended to inventory and monitor the water resources and associated activities of a municipality. Some WRMPs are done on a regional basis where a common watershed, river, or large water body are shared by two or more municipalities. Issues such as withdrawals, present and project populations, water quality, and threats are examined in order to present an accurate basis for management of the water resources.

Although often separate from municipal governments, Historical Societies are excellent sources of archived records. Many have produced **inventories of historical sites**, old cellar holes, cemeteries, stone walls, archaeological sites, existing historic buildings, or old mill sites; often, preliminary maps of these sites are included. These valuable historical resources should also be recorded in the municipal Master Plan as a next step in historical resource protection.

A collection of **digitized maps** offers an opportunity to visually display where resources occur. Many municipalities in the Central Region have digitized their tax maps and zoning maps, and CNHRPC offers free base map production for members. Other resources which are inventoried on maps include historic sites, wells, scenic roads, aquifers, soils, floodplains, conservation lands, and geologic features. As previously noted, the CNHRPC has provided a series of resource overlay maps to member municipalities participating in the REPP.

Land Protection Initiatives

A series of **educational sessions** could be held by the municipality or could be co-sponsored by a conservation organization or by the CNHRPC. A popular workshop, entitled the *Dollars and Sense of Open Space*, illustrates that development costs are often higher than open space costs in the long-term. Other workshop opportunities, such as the training sessions produced by the NH Office of State Planning, law lectures by NH Municipal Association, and mini-workshops by the NH Association of Conservation Commissions, offer current techniques about land protection methods on an annual basis. Citizen participation in these informational sessions is crucial to the overall support that land conservation projects must have.

Procuring conservation easements are a means of directly involving landowners as well as securing the land for future protection. Easements, which separate the development rights from the property, can be donated to or purchased by a municipality or land trust. Common local approaches of obtaining easements include the initiation of **contacting the landowner** by the Conservation Commission or by a donation from the landowner or developer at the subdivision application stage. A recent catalyst of the conservation easement movement has developed

through estate planning, where an easement is donated on the land, thus reducing estate taxes, and heirs can retain the property.

The establishment of a **land conservation fund** at the municipal level permits the fee-simple purchase of conservation lands. Through a vote at Town Meeting, a percentage of the land use change tax can be allocated into this fund; however, the municipality must have an established Conservation Commission. The land conservation fund essentially enables the municipality to protect land without tapping into its own budget for the funds.

Various **volunteer committees**, such as a Trails and Pathways Committee to determine potential future easement acquisitions and maintain the local recreational trail network, can be organized to assist the Conservation Commission and Planning Board with their workload. A benefit of a self-organized volunteer committee, as opposed to a formal appointed or elected municipal committee, is that individuals will serve according to their particular interests.

The **redevelopment of and reuse of old buildings and grounds** should be encouraged as an alternative to new development. Main Street New Hampshire is a program that assists communities with revitalizing their downtowns, in effect strengthening the economic, historical, and cultural facets of the municipality. Another program, the NH DES "Brownfields", offers financial support to property owners by encouraging the voluntary cleanup and redevelopment of environmentally contaminated properties. Methods such as these limit sprawl related to new development and bring added value to previously unused, blighted properties.

Enacting Local Resource Protection Ordinances and Regulations

Consider the creation of open space through the municipal zoning ordinance. Commonly referred to as **open space development** or "cluster development" or "incentive zoning", concentration of new housing on smaller than traditional lots encourages the developer to dedicate a large portion of the entire development to permanent preservation. Developers can benefit from open space development by its inherently less expensive infrastructure and by the added value to the building lots that open space creates. A density bonus could be granted, allowing for more building lots to be created through open space development than through traditional zoning. The municipality also benefits from open space development through a significant land donation from the developer. This innovative zoning control can allow the municipality and developer to work cooperatively and conserve large contiguous tracts of land in the process. RSA 674:21, I(f).

The **current use** tax law (RSA 79-A) is a widely-used tool in which property owners ease their tax burden by placing their land under "current use". While this status helps them lower their property taxes on the parcel, the right to use their property in certain ways has been rescinded. New house construction, subdivision, or other significant terrain- and use-altering activities are prohibited until the property is removed from its current use status. Termination of this status on a parcel requires property owners to pay a portion of the assessed value of the parcel back to the municipality. This penalty not only discourages the removal of the current use status, it also create opportunities for municipalities to use the current use change tax in ways that benefit the community. Many municipalities in the Central Region have, at Town Meeting, voted to allow a percentage of the penalties to be allocated to a land acquisition fund. This fund, noted above, is used to purchase lands of significant open space, aesthetic, historical, or ecological value.

Local **noise ordinances** can be implemented to prevent or limit disruptive peace disturbances. The site plan review regulations (RSA 674:44, I(a)(3)) provide best support for successfully implementing a noise ordinance. Maximum decibel levels could be set for each of the zoning districts within a municipality. The power of local governments to regulate noise levels can be found under RSA 31:39 (n). Noise pollution characterizes one of the most difficult and subjective environmental problems which municipalities can address.

Prime wetlands can be designated and mapped to further protect wetlands with functional values that are most important to a municipality. To do so, representatives of a Conservation Commission or Planning Board can utilize the *Method for the Comparative Evaluation of Nontidal Wetlands in NH*, also known as the "NH Method", a publication by the NH Department of Environmental Services (NH DES). The procedure fully documents and compares wetlands within a municipality to determine which ones are the most valuable. RSA 482-A gives the power of designating the most valuable wetlands, or prime wetlands, to the municipalities. Designated prime wetlands are highly considered for their importance to the municipality when applications for wetlands permitting or dredge and fill are filed with the NH DES. These same wetlands can be further restricted from development or other use through setbacks and conditional use permits within the local zoning ordinance. Prime wetlands so designated are listed within the Zoning Ordinance.

Local **Historic Districts**, established through the Zoning Ordinance, provide regulatory protection of historic areas and features, even National Register of Historic Places listings, within its zoning boundaries. Through RSAs 673-677, an Historic District Commission monitors any modifications to structures, stone walls, or sites through an application review process and has the power to grant or deny requests depending on the criteria of the ordinance.

The power of creating and delivering "Cease and Desist Orders" was granted to municipalities through RSA 676:17-a. This tool is typically used as a reactive way of enforcing the local land use regulations. Observations of the inappropriate use are reported to the code enforcement officer, Planning Board, or Conservation Commission, who request the Board of Selectmen to authorize a Cease and Desist Order. Although potentially useful for short-term solutions, this technique does little to provide useful education necessary for long-term resource stewardship; as this is an enforcement issue, disputes can occur that may end up in court.

NH RSA 674:22, **Growth Management and Timing of Development**, allows municipalities to regulate and control the timing of development only after the Planning Board has prepared a Master Plan and Capital Improvements Program. Such an ordinance has been utilized as a tool to limit the number of new dwelling units that are built within a given year. This technique has become a recent trend in the Central Region, particularly where intense population growth is occurring. Used as a short-term measure, the Growth Management Ordinance can ease development pressure on a temporary basis; however, the intent of the legislation is to provide a municipality with a period of time, specified in the Ordinance, to establish the necessary infrastructure to accomodate anticipated growth.

Protection through Recognition and Celebration

The **National Register of Historic Places** is a federal program which recognizes the importance of historic structures and areas through a rigorous application process. While a listing on the Register does not protect the site, it does celebrate its historical significance and does lend itself to promoting tourism and preservation of the site.

The **NH Historical Markers** program of the NH Division of Historical Resources (NH DHR) provides a local way to recognize places that have a historical significance to the municipality. The class of the road near the site determines the manner in which a marker should be requested. For a site near a state highway, an interested citizen or group of people petition the Commissioner of the NH Department of Transportation (NH DOT), which is authorized to erect markers, at NH DOT's expense, in the right-of-way of any state highway. A site along a local road is requested through the NH DHR by the municipality or historical society, which bear the costs of the erecting the marker.

The Scenic and Cultural Byways program of the NH Office of State Planning (NH OSP) and the NH DOT creates a statewide byways system that features natural and cultural resources for the purpose of attracting New Hampshire travelers and out-of-state tourists. The program has established a process for nominating roads as official State Byways, already having designated over 700 miles of road as Scenic Byways throughout the State. Heritage tourism is an industry to be further capitalized on in New Hampshire; the Scenic and Cultural Byways program is an inexpensive measure designed for this purpose.

Another celebratory technique of roads and highways is the Adopt-A-Highway program offered through the NH Department of Transportation. Organizations or employers agree to clean up the roadsides and inform NH DOT of any problems along the route. Similar municipal Adopt-A-Spot programs allow individuals, families, or employers to maintain and beautify commons, traffic islands, or picnic areas for public enjoyment. Municipal established Beautification Committees in the Central Region perform these and other aesthetic services such as tree and flower plantings.

Old Home Day in New Hampshire has become a long-standing tradition. Historical Societies and other groups organize tours of old homes, historic sites, historic buildings and offer parades, book fairs, and good old-fashioned community fun. These important cultural events involve children, parents, and the elderly and create the opportunity to further cement the people to their heritage.

Forming Local Partnerships

The formation of a **Regional Resource Conservation Committee** could provide a catalyst for unified protection of our Central New Hampshire Region resources. The majority of respondents from the Spring 1998 Natural, Cultural, and Historical Resources Survey responded favorably toward the creation of such a committee. Since natural resources do not recognize political boundaries, this or a similar type of committee could create a roundtable for discussion of common issues that are of concern to local officials and conservation organizations.

Multi-town greenway projects promote partnerships, create beneficial habitats and travel

corridors for wildlife, and provide an opportunity for people to recreate. Two examples of successful greenway projects in the Central Region are the Sunapee-Ragged-Kearsarge (SRK) Greenway and the BearPaw Regional Greenway. The SRK Greenway focuses on a 75-mile hiking trail from Mount Sunapee to Ragged Mountain to Mount Kearsarge. The BearPaw Greenway has focused on providing an undeveloped corridor, between the State Parks of Bear Brook and Pawtuckaway, to assist in species preservation and diversity. Greenway partnerships, although requiring tremendous coordination, are very effective in achieving long-lasting and large-scale results.

The Central New Hampshire Regional Planning Commission's mission is to provide support for local member municipalities. This support includes assistance with any of the above-mentioned objectives, new ventures and projects, and assistance with determining what specific activities could benefit your municipality's resources. The CNHRPC staff specialize in mapping, Master Plan revisions, Zoning Ordinance revisions, and regulations revisions, plus keeping tabs on current legislative issues which effect municipalities. A new staff position, Natural Resources Planner, was created in late 1997 to address issues presented in this *Inventory*. Municipalities are highly encouraged to get involved with the CNHRPC Regional Environmental Planning Program in order to further complement their existing resource protection measures.

In addition, the CNHRPC has access to and information about a number of grant programs which are conservation-related. Often, CNHRPC's regularly published newsletters will contain information about environmental grant opportunities, but many others are only available by contacting the staff.

Additional **non-profit conservation and education organizations** exist to assist landowners and municipalities with protecting and sustainably managing their natural, cultural, and historical resources. The Appendix entitled *Resource Agencies* contains a brief listing. Despite the enormity of any project or undertaking, it is crucial to remember that professional assistance is awaiting municipal resource protection projects.

Legislatively Protecting New Hampshire's Resources

The New Hampshire Legislature has been seeing tremendous support working in favor of conservationism. Through Senate Bill 493, the **New Hampshire Land and Community Heritage Commission** published an Interim Report in January 1999 (*Appendix A*) which recommends the creation of a public/private partnership to conserve priority natural, cultural, and historical resources. Legislation will be proposed in 2000 in order to achieve the means and the funds necessary for such a program.

House Bill 1238 created the Land Use Management and Farmland Preservation Study Committee. Their legislative mandate was to "...study ways to manage land use and to preserve and protect the State's farmland, rural and community character, and environmental quality against low density sprawl and the loss of sense of place." The Committee has recommended that the NH Office of State Planning be funded to conduct a thorough study of growth versus open space and to undertake a strong educational effort, plus create a continuing program on

sprawl/open space and fund a new Conservation Investment Program. Proposed legislation has been drafted to achieve these measures.

Another 1998 accomplishment was the passage of House Bill 627, creating a **conservation license plate trust fund**. Proceeds from these special plates, which will depict icons of New Hampshire's resources, will be allocated among certain State agencies for specific kinds of "physical and tangible cultural and environmental projects".

The Comprehensive Shoreland Protection Act (RSA 483-B) was amended under Senate Bill 365 in 1998 to include the Upper and Lower Merrimack, Lamprey, Contoocook, and Swift Rivers under its jurisdiction. This amendment corrected an important oversight; the rivers designated into the Rivers Management and Protection Program prior to January 1, 1993 were unprotected from shoreland development under the Shoreland Protection Act. The passage of this bill, made possible through diligent and committed cooperative efforts, marked a victory for water resource protection.

In 1999, similar conservation-oriented bills are being sponsored. At the time of printing this *Inventory*, they had only been assigned Legislative Service Request (LSR) numbers; House and Senate Bill numbers will be assigned later in the year. They include:

- rightharpoonup establishing a coordinated and comprehensive planning effort by State agencies to deter sprawl (H-0188-R)
- > establishing a matching grant program to preserve historic agricultural structures (H-0212-R)
- lower taxation of land held for water supply purposes (H-0192-L)
- ➤ authorizing the consideration of traditional village plans in local zoning codes (H-0189-R) and
- ➤ authorizing and funding the NH OSP to conduct a study of the effects of sprawl in the State (a recommendation of the Land Use Management and Farmland Preservation Committee noted above, H-0187-R)

Continued funding of the **Regional Environmental Planning Program** (REPP) will be recommended to the New Hampshire Legislature in 1999 by NH DES. The activities and the products of the REPP not only assist municipalities within the State with their own resource protection, but they also provide valuable information and support to the New Hampshire Land and Heritage Community Commission. The Central New Hampshire Regional Planning Commission's Year-Two REPP, like the remaining eight RPCs, will include a similar municipal involvement process with the resources identified in 1998, therefore allowing for a more comprehensive listing of priority resources.

These examples show that through diligence and popular support, conservationism is receiving much positive attention. Individuals can contact their legislators, or municipal boards can jointly endorse bills or issues that they feel strongly about.

State/Regional and Public/Private Conservation and Preservation Partnerships

An overall key element of resource protection is the partnership of a wide variety of groups, interests, agencies, and organizations. Although these not-for-profit conservation groups and organizations focus on different projects and missions, fundamentally the goals are quite similar. As each organization has distinct skills and expertise to offer, great accomplishments can be gained by forming partnerships.

The Regional Environmental Planning Program (REPP) was established as a partnership between the NH DES and the regional planning commissions with the aim of providing the New Hampshire Land and Community Heritage Commission (NHLCHC) with the natural, cultural, and historical resource information crucial to their legislative mandate. While the RPCs worked at the grassroots level, the NHLCHC has the capacity to make legislative recommendations based on these grassroots findings as presented by the RPCs.

One supporting group, the Citizens for New Hampshire Land and Community Heritage, sprang from the popular growing sentiment that the success of the NHLCHC was vital to retaining New Hampshire's rural character and to preserving its resources. Over forty active local conservation organizations have heartily endorsed the Citizens and their education/lobbying mission.

The biggest challenge to any partnership endeavor is funding. While environmental goals and ideals are commonly shared, these state, regional, public and private non-profits are nonetheless primarily dependent upon grants and contributions in order to accomplish their missions. With the current environmental climate in the NH Legislature, the NHLCHC and other strongly-supported groups have a rare opportunity to present a united front to obtain additional federal dollars in Congress and, perhaps, additional funding from the State of New Hampshire for resource preservation.

Acronym Listing

BMP - Best Management Practices

CCC - Civilian Conservation Corps

CNBRLAC - Contoocook and North Branch Rivers Local Advisory Committee

CNHRPC - Central New Hampshire Regional Planning Commission

CSRC - Complex Systems Research Center (University of NH)

EIS - Environmental Impact Statement

FEMA - Federal Emergency Management Agency

GIS - Geographic Information System

GPS - Global Positioning System

GRANIT - Geographically Referenced Analysis and Information Transfer (NH GIS database)

ISTEA - Intermodal Surface Transportation Efficiency Act

LAC - Local Advisory Committee (river)

LCIP - Land Conservation Investment Program

LWCF - Land and Water Conservation Fund

NFIP - National Flood Insurance Program

NH DES - NH Department of Environmental Services

NH DHR - NH Division of Historical Resources

NH DOT - NH Department of Transportation

NH DRED - NH Department of Revenue and Economic Development

NH F&G - NH Fish and Game

NHLCHC - NH Land and Community Heritage Commission (created by Senate Bill 493)

NH NHI - NH Natural Heritage Inventory

NH OSP - NH Office of State Planning

NHACC - NH Association of Conservation Commissions

NRCS - Natural Resource Conservation Service, Division of USDA

NRHP - National Register of Historic Places

NRI - Natural Resource Inventory

NWI - National Wetlands Inventory

PWS - Public Water Supply

REPP - Regional Environmental Planning Program

RPC - Regional Planning Commission

RSA - Revised Statutes Annotated (NH)

SCS - Soil Conservation Service (formerly); see NRCS

SPNHF - Society for the Protection of New Hampshire Forests

TEA-21 - Transportation Equity Act for the 21st Century

UMRLAC - Upper Merrimack River Local Advisory Committee

USDA - US Department of Agriculture

USEPA - US Environmental Protection Agency

USGS - US Geological Survey

WHPA - Wellhead Protection Area

WRMP - Water Resource Management Plan

WMA - Wildlife Management Area

Glossary

In order to create a logical system of resource definitions, we separated the glossary items into a series of categories. Easier association of the terms to one another tends to create a firmer understanding of the whole.

ECOLOGICAL

biodiversity

concept of genetic and ecological variability, and the processes and interactions that weave biological and physical elements of the planet together

ecology

the study of interactions between living things and their environment *ecosystem*

a natural community resulting from the interactions among the climate, vegetation, animal life, and the soil; also called ecological system or natural community *endangered species*

species with low prospects for survival due to a variety of factors, such as loss of habitat, over-exploitation, disease, or disturbance

habitat

the environment in which the requirements of a specific plant or animal are satisfied *natural area*

undeveloped site which is primarily used or noted for its inherent natural features *sustainability*

current use of resources in such a manner that allows for something to be left for utilization by future generations

threatened species

species with a possibility of becoming endangered due to living conditions wildlife corridors

tracts of land through which wildlife travel; typically follow water courses or geologic features (such as ridge lines)

GEOLOGIC

bedrock

general term that describes solid rock underlying soils and/or other unconsolidated materials

drumlin

oval, spoon-shaped hill of glacial till; in NH, drumlins are typically oriented to the southeast.

erratics (glacial)

large boulders scattered irregularly across a landscape that were deposited during the last glacial period

esker

long winding ridges of sand and gravel deposited in valley bottoms by glaciers as they retreated

hardpan

very dense, impervious soil layer, caused by the compaction or cementation of soil particles

horizon

parallel with land surface, a distinct layer of soil composed of material with similar properties

kame terrace

formed where ice and high valley wall met: as water melted from glacier, it created terrace-like deposits of sand & gravel along the ridge

kettle hole

steep sided depression, typically lacking surface drainage; formed by glacial ice fragment melting in area of till

pluton

large body of intrusive igneous rock from glacial lakes

soil profile

vertical section of soil through all horizons, down to parent material

soil series

"A group of soils having horizons similar in differentiating characteristics and arrangements in the soil profile, except for texture of the surface layer"?

till

unsorted, unstratified mixture of wide variety of materials deposited by glaciers; primarily consisting of silt, sand, gravel, clay, and boulders

WETLANDS

algal bloom

rapid growth of floating, simple plant life in a body of water

alluvium

general term for sediment deposits created by flowing water

anaerobic

condition in which oxygen is absent or in very limited supply

estuarine

broadly, tidal wetlands

eutrophication

manner in which water becomes enriched with plant nutrients (most commonly phosphorous and nitrogen)

hydric soil

soil that is wet long enough to periodically produce anaerobic conditions which affects plant growth

lacustrine

pertaining to a lake: also, a wetland produced by a lake

marsh

an emergent wetland that is flooded seasonally or permanently

obligate wetland species

plants that are ninety-nine percent likely to grow in a wetland

palustrine

freshwater wetlands, the majority of all wetlands

parent material

unconsolidated mineral or organic matter from which the soil profile is developed *permeabilty*

soil characteristics (such as compactness and porosity) that enables water to move down through a soil profile: measured in centimeters/hour

poorly drained soil

soil is saturated for long periods, or periodically during growing season an

pertaining to the shoreline of naturally occurring body of flowing water *riverine*

wetlands within river or stream channels

saturated

condition in which all pores between soil particles are filled with water *vernal pool*

small, seasonal water body filled with water for only a short period of time in the spring very poorly drained soil

free water remains on or near land surface for most of the growing season water table

the level at which the ground is completely saturated with water: also called "zone of saturation"

WATER

aquifer

geological formation such as fractured bedrock and glacial sands or gravel capable of yielding a water supply; also known as groundwater

base flow

part of total stream flow; sustained low flow, typically generated by groundwater discharge into stream channel

bedrock aquifer

fractures in bedrock filled with water

bog

acidic, nutrient-poor wetland generally composed of peat layers formed by waterlogged sphagum moss; primarily recharged by precipitation events

delta

shallow, water-filled, sandy v-shaped plains, formed by meltwater streams flowing into glacial water bodies

discharge area

area in which groundwater eventually reaches the surface of the land (in the form of seep, swamp, stream, ocean, etc)

diverted infiltration

occurs where development has created impervious surfaces and causes a condition in which water cannot infiltrate the soil to recharge the groundwater

floodplain

strips of relatively flat land abutting stream or river channels that are periodically flooded *groundwater*

depth in unconsolidated material that is completely saturated with water ground water recharge areas

area in which precipitation infiltrates surface material and reaches groundwater: infiltration, or percolation, is dependant on soil characteristics (porosity, permeability, and degree of saturation): precipitation that does not percolate becomes surface runoff induced infiltration

an altered groundwater flow pattern caused by outside sources, such as a dug well, that pumps out groundwater and becomes the de facto discharge zone (as opposed to the naturally occurring discharge zone): in such conditions, surface waters will infiltrate the soil at a faster rate

intermittent stream

a stream which primarily flows during the wet seasons and remains dry for a portion of the year

non-point source pollution

pollution of surface waters, wetlands, and aquifers caused by precipitation runoff that carries surficial pollutants into these water bodies

percolation

water movement under hydrostatic pressure through interconnected pores of a rock or soil

perennial stream

a stream which normally flows year-round

permeability

interconnectedness of spaces between particles which indicates how well water can flow through an area

point source pollution

pollutants in surface or ground water that stem from a specific source *porosity*

ratio between size of particles/size of pores

saturated thickness

measurement of production capabilities of a stratified drift aquifers: given in feet, thickness of saturation zone that extends below the water table

stormflow

part of total stream flow; generated by precipitation events stratified drift aguifer

areas of stratified drift deposits that are saturated with a usable amount of water stratified drift deposits

materials deposited by glaciers - sorted, unconsolidated layers consisting mainly of sand and gravel

surface water

open bodies of water such as lakes, streams, or ponds total stream flow

combination of base flow and stormflow

transmissivity

the rate at which water can be transmitted, usually given in gallons/day/ft2 *unconsolidated material*

material with space between particles (sand, as compared to granite)

water table

measurement below the top layer of a saturated zone

watershed

area of land drained by stream or river: also called drainage basin

POLITICAL

ad valorem taxation

property tax that is levied on the fair market value of land

current use taxation

reduced rates of property taxation for forest land (or other type of open space use): tax is based at its use value, as opposed to the fair market value

conservation easement

legal agreement between a landowner and a government or private conservation organization that limits the type and scope of development: restriction permanently attached to deed

fair market value

highest price of a property in an open, competitive market

fee interest acquisition

the assumption and full ownership of all rights to property

geographic information systems (GIS)

an organized collection of computer hardware, software, personnel, and geographic data; used to produce maps for display and analysis

land trust

organization (typically non-profit) with legal capability to provide landowners with a variety of land protection measures

less-then-fee accession

the assumption of certain rights to a property (an example is a conservation easement, which is the assumption of development rights by a conservation organization)

master plan

long range plan for a town or municipality intended to be used to guide the development and growth of a community and prepared in accordance with NH RSA 674

NH state plane coordinate system

one of the plane-rectangular coordinate systems established by the Federal government for defining positions of points the earth's surface in terms of X and Y coordinates open space

land set aside for non-development type uses (including forestry and agriculture) ordinance

law or regulation adopted by municipal or town legislature zoning

districts delineating areas with established regulations concerning development

HISTORIC and CULTURAL

cultural

describes an occasion, attitude, object, or location in terms of heritage of a particular place or person

scenic road

a road officially designated and protected by a municipality or state because its aesthetic vistas and surroundings; also any other road with the same aesthetic qualities *historic site*

a site which is of high value for reasons of history or archaeology

Resource Agencies

Ausbon-Sargent Land Preservation Trust (local land trust)

PO Box 2040 New London, NH 03257 phone 526-6555

Bow Open Spaces (local land trust)

41 South Bow Road Bow, NH 03304 phone 225-3678

BearPaw Regional Greenways (regional land preservation partnership)

PO Box 19 Deerfield, NH 03037 phone 463-7562

CNHRPC (local and regional land use, transportation, and resources planning)

12 Cross Street Penacook, NH 03303 phone 753-9374

Concord Conservation Trust (local land trust)

54 Portsmouth Street Concord, NH 03301 phone 224-9945

<u>Contoocook and North Branch Rivers Local Advis Comm</u> (river education and protection)

for current information, contact NHDES' Rivers Management & Protection Prog at 271-1152

Division of Forests and Lands (forestry management)

NH DRED 172 Pembroke Road PO Box 1856 Concord, NH 03302-1856 phone 271-2215

Governor's Recycling Program (recycling partnerships, programs, and legislation)

2 ½ Beacon Street Concord, NH 03301-4497 phone 271-1098

Hillsborough County Natural Resources Conservation Service and

Hillsborough County Conservation District (preservation projects, education)

468 Route 13 South Milford, NH 03055 phone 673-2409

Hillsborough County UNH Cooperative Extension (forestry, agriculture, education)

468 Route 13 South Milford, NH 03055 phone 673-2510

Main Street USA - New Hampshire (downtown revitalization)

14 Dixon Avenue, Suite 102 Concord, NH 03301 phone 223-9942

Merimack County Natural Resources Conservation Service and

Merrimack County Conservation District (preservation projects, education)

10 Ferry Street, Box 312 Concord, NH 03301 phone 223-6023

Merrimack County UNH Cooperative Extension (forestry, agriculture, education)

351 Daniel Webster Highway Boscawen, NH 03303 phone 225-5505

National Park Service (trails, projects)

NH/VT Region The King Farm 5 Thomas Hill Woodstock, VT 05091 phone 802-457-4323

Natural Heritage Inventory (rare and endangered plant and invertebrate species)

NH DRED 172 Pembroke Road PO Box 1856 Concord, NH 03302-1856 phone 271-3623

NH Association of Conservation Commissions (coalition and support)

54 Portsmouth Street Concord, NH 03301-5400 phone 224-7867

NH Audubon Society (land and species preservation)

Silk Farm Road Concord, NH 03301-8200 phone 224-9909

NH Department of Transportation (enivornmental services, etc)

1 Hazen Drive PO Box 483 Concord, NH 03302-0483 phone 271-2231 (Environmental Services) phone 271-6495 (Information)

NH Division of Historical Resources (historical sites and inventories)

19 Pillsbury Street PO Box 2043 Concord, NH 03302-2043 phone 271-6434

NH Fish and Game (rare and endangered vertebrate species)

Non-Game and Endangered Wildlife Program 2 Hazen Drive Concord, NH 03301 phone 271-2461

NH Land & Community Heritage Commission (created by SB493 in 1998 to developstate-

wide preservation strategies) PO Box 697

Concord, NH 03302-0697 phone 226-0012

NH Municipal Association (municipal law lecture series, legal counsel)

PO Box 617 Triangle Park Drive Concord, NH 03302-0617 phone (800) 852-3358

NH Office of State Planning (general land use planning, Scenic and Cultural Byways)

2 ½ Beacon Street Concord, NH 03301 phone 271-2155

NH Preservation Alliance (formerly Inherit NH) (historical and heritage preservation)

PO Box 268 Concord, NH 03302-0268 phone 224-2281

NH Rivers Council (river education and protection)

54 Portsmouth Street

Concord, NH 03301 phone 226-2696

NH Rural Development Council (rural preservation and development)

2 ½ Beacon Street Concord, NH 03301 phone 229-0261

Rivers Protection and Management Program (river nomination, designation, and support)

NH DES 6 Hazen Drive PO Box 95 Concord, NH 03302-0095 phone 271-1152

Society for the Protection of NH Forests (land preservation)

54 Portsmouth Street Concord, NH 03301-5400 phone 224-9945

Source Water Protection Program (grant program)

NH DES 6 Hazen Drive PO Box 95 Concord, NH 03302-0095 phone 271-1168

Sunapee-Ragged-Kearsarge Greenway (trail network)

PO Box 1684 New London, NH 03257 phone 526-4559

The Nature Conservancy (land trust)

2 ½ Beacon Street, Suite 6 Concord, NH 03301 phone 224-5853

Turkey River Basin Trust (local land trust)

33 Washington Street Concord, NH 03301 phone 225-9721

USDA Natural Resources Conservation Service (education, technical assistance)

Federal Building Durham, NH 03824 phone 868-7581

US Geological Survey (water and geologic projects)

NH/VT District 361 Commerce Way Pembroke, NH 03275 phone 226-7837

<u>Upper Merrimack River Local Advisory Commitee</u> (river education and protection)

PO Box 3019 Boscawen, NH 03303-3019 phone 796-2615

Waste Management Division (solid waste programs)

NH DES 6 Hazen Drive PO Box 95 Concord, NH 03302-0095 phone 271-2900

